GenCore version 4.5

OM protein - protein search, using sw model

Run on: May 23, 2001, 14:19:06 ; Search time 21.01 Seconds
(without alignments)
1197.136 Million cell updates/sec

Title: US-08-883-036A-2
Perfect score: 440
Sequence: 1 MEQRGQNAPAASGARKRHGP.....HLLSSGKFMYLEGNADSAMS 440

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 390729 seqs, 57163235 residues

Word size : 6

Total number of hits satisfying chosen parameters: 2267

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 1000 summaries

Database : A_Geneseq_0401:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	408	92.7	440	19	W79260	Tumour necrosis fa
2	373	84.8	440	20	Y05725	Tumour necrosis fa
3	373	84.8	440	21	B01340	TNF-related apopot
4	234	53.2	350	20	Y00934	Human DR5s protein
5	229	52.0	303	19	W76828	Human TR6 partial
6	229	52.0	411	19	W79261	Tumour necrosis fa
7	229	52.0	411	19	W76827	Human TR6 protein.
8	229	52.0	411	19	W79083	Human death domain
9	229	52.0	411	20	W93608	Human killer adria
10	229	52.0	411	20	W93576	Human hAPO8 protei
11	229	52.0	411	20	Y00932	Human DR5 protein
12	229	52.0	411	21	B29790	Human death domain
13	227	51.6	411	20	W88410	Human Apo-2 ligand
14	227	51.6	411	20	W83321	Human Apo-2 protei
15	227	51.6	411	21	Y55805	Human Apo-2 polype
16	67	15.2	67	21	B26992	Human DR5 death do
17	16	3.6	410	20	W93577	Human APORP protei
18	16	3.6	467	22	B50896	Human DR4. Homo s
19	16	3.6	468	19	W64483	Human DR4 protein.
20	16	3.6	468	20	Y31602	Human death recept
21	16	3.6	468	20	W93609	Human DR4 protein.
22	16	3.6	468	21	Y72022	Human Death Domain
23	16	3.6	468	21	Y72023	Human Death Domain
24	16	3.6	468	21	B08546	Amino acid sequenc
25	16	3.6	468	21	B01339	TNF-related apopot
26	16	3.6	468	22	B49241	Human DR4 protein.
27	12	2.7	386	20	W98200	RTD, inhibitor of
28	12	2.7	386	20	Y04144	Human Tango-74 pro
29	12	2.7	386	20	W99018	Human TRAIL recept
30	12	2.7	386	20	W99019	Human TRAIL recept
31	12	2.7	386	20	W92792	Human TNF receptor
32	12	2.7	386	21	B01341	TNF-related apopot
33	12	2.7	386	21	Y69991	Human receptor-ass
34	12	2.7	386	22	B50892	Human TR10 recepto
35	9	2.0	362	16	W00635	ILTV glycoprotein
36	9	2.0	362	17	W06787	ILTV glycoprotein
37	8	1.8	67	21	B26991	Human DR4 death do
38	8	1.8	144	19	W49034	Human death domain
39	8	1.8	240	20	Y32944	Mutant threonine d
40	8	1.8	240	20	Y05708	Feedback insensiti
41	8	1.8	259	19	W64668	Human TRID protein
42	8	1.8	259	20	Y05726	Tumour necrosis fa
43	8	1.8	259	20	W93578	Human hAPO9 protei
44	8	1.8	259	20	W88408	Human Apo-2DcR pro
45	8	1.8	259	22	B36696	Human tumour necro
46	8	1.8	259	22	B53091	Human angiogenesis
47	8	1.8	299	19	W76331	Human tumour necro
48	8	1.8	299	20	Y29864	Human secreted pro
49	8	1.8	299	20	Y05744	Tumour necrosis fa
50	8	1.8	299	20	Y00933	Human TRAIL-R3 pro
51	8	1.8	299	20	W94671	Human TNF-related
52	8	1.8	299	20	W88409	Human Apo-2DcR pro
53	8	1.8	299	21	B01343	Death receptor. H
54	8	1.8	502	20	Y32941	Mutant threonine d
55	8	1.8	502	20	Y05705	Feedback insensiti
56	8	1.8	532	20	Y32943	Mutant threonine d
57	8	1.8	532	20	Y05707	Feedback insensiti
58	8	1.8	539	20	Y32942	Mutant threonine d
59	8	1.8	539	20	Y05706	Feedback insensiti
60	8	1.8	545	20	Y32947	Mutant threonine d
61	8	1.8	545	20	Y05711	Feedback insensiti
62	8	1.8	590	20	Y32950	Mutant threonine d
63	8	1.8	592	20	Y32939	Mutant threonine d
64	8	1.8	592	20	Y32948	Mutant threonine d
65	8	1.8	592	20	Y32951	Wild type threonin
66	8	1.8	592	20	Y05702	Arabidopsis wild-t
67	8	1.8	592	20	Y05703	Feedback insensiti
68	8	1.8	600	20	Y32952	Mutant threonine d
69	8	1.8	609	20	Y32940	Mutant threonine d
70	8	1.8	609	20	Y05704	Feedback insensiti
71	7	1.6	29	18	W10929	Polyclonal anti-fe
72	7	1.6	41	18	W27380	Amino-terminal of
73	7	1.6	56	20	Y33228	Human transcriptio
74	7	1.6	59	21	G27648	Arabidopsis thalia
75	7	1.6	84	21	G04909	Arabidopsis thalia
76	7	1.6	87	21	G04908	Arabidopsis thalia
77	7	1.6	87	21	G50915	Arabidopsis thalia
78	7	1.6	88	19	W98420	H. pylori GHPO 340
79	7	1.6	96	21	G04907	Arabidopsis thalia
80	7	1.6	96	21	G50913	Arabidopsis thalia
81	7	1.6	97	21	B16757	Bacteriophage Dp-1
82	7	1.6	98	21	B16753	Bacteriophage Dp-1
83	7	1.6	170	16	R64977	Rex region gene pr
84	7	1.6	171	16	R84656	STLVpan-p rex prot

85	7	1.6	173	18	W32438	Mycobacterium tube
86	7	1.6	173	18	W32370	Mycobacterium tube
87	7	1.6	173	19	W81673	M. tuberculosis im
88	7	1.6	173	19	W64310	Mycobacterium tube
89	7	1.6	173	20	Y39112	M. tuberculosis an
90	7	1.6	173	20	Y38975	M. tuberculosis re
91	7	1.6	178	20	Y39187	M. tuberculosis an
92	7	1.6	178	20	Y39044	M. tuberculosis re
93	7	1.6	181	19	W72903	Mycobacterium tube
94	7	1.6	181	20	Y21920	Amino acid sequenc
95	7	1.6	182	20	Y39185	M. tuberculosis an
96	7	1.6	182	20	Y39042	M. tuberculosis re
97	7	1.6	191	21	G25102	Arabidopsis thalia
98	7	1.6	193	21	G25105	Arabidopsis thalia
99	7	1.6	193	21	G26364	Arabidopsis thalia
100	7	1.6	195	21	G09941	Arabidopsis thalia
101	7	1.6	196	21	B43796	Human cancer assoc
102	7	1.6	197	21	Y90334	B. subtilis nitror
103	7	1.6	206	21	G25101	Arabidopsis thalia
104	7	1.6	209	21	G25104	Arabidopsis thalia
105	7	1.6	236	21	G44412	Arabidopsis thalia
106	7	1.6	236	21	G53940	Arabidopsis thalia
107	7	1.6	245	16	R81416	Hepatitis GB virus
108	7	1.6	245	21	B08999	Hepatitis GB virus
109	7	1.6	267	21	G33313	Zea mays protein f
110	7	1.6	284	21	G33312	Zea mays protein f
111	7	1.6	307	21	G44411	Arabidopsis thalia
112	7	1.6	307	21	G53939	Arabidopsis thalia
113	7	1.6	321	21	G33311	Zea mays protein f
114	7	1.6	353	21	Y97047	Partial murine TAN
115	7	1.6	354	17	R91950	Lung cancer specif
116	7	1.6	354	21	Y96200	Non-small cell lun
117	7	1.6	357	21	B18426	Amino acid sequenc
118	7	1.6	360	21	Y73343	HTRM clone 2724537
119	7	1.6	362	21	G44410	Arabidopsis thalia
120	7	1.6	362	21	G53938	Arabidopsis thalia
121	7	1.6	397	18	W17933	Murine lymphoid en
122	7	1.6	408	21	Y91059	Streptomyces nogal
123	7	1.6	420	18	W20266	H. pylori transmem
124	7	1.6	423	19	W70477	Girdwood S.A.virus
125	7	1.6	423	19	W70470	South African Arbo
126	7	1.6	424	18	W20977	H. pylori transmem
127	7	1.6	442	16	R79033	Nuclear inclusion
128	7	1.6	442	21	B56594	Human prostate can
129	7	1.6	450	21	B44534	Virulence gene pro
130	7	1.6	457	21	G10061	Arabidopsis thalia
131	7	1.6	468	21	G10060	Arabidopsis thalia
132	7	1.6	523	17	W02257	Mouse L-glutamate
133	7	1.6	524	19	W54391	Homo sapiens gluta
134	7	1.6	524	19	W52578	Human excitatory a
135	7	1.6	525	18	W26601	Human glutamate tr
136	7	1.6	525	19	W58550	Human excitatory a
137	7	1.6	525	20	Y28297	Amio acid sequence
138	7	1.6	525	20	Y22030	Human EAAT3 amino
139	7	1.6	525	20	Y18416	Human EAAT3 amino
140	7	1.6	525	20	W83924	Human excitatory a
141	7	1.6	525	21	B15417	Human excitatory a
142	7	1.6	525	21	Y97142	EAAT3 human excita
143	7	1.6	525	21	Y99964	Human amino acid t
144	7	1.6	525	21	B03654	Excitatory amino a
145	7	1.6	525	21	Y78146	Human excitatory a
146	7	1.6	539	20	Y23914	Amino acid sequenc
147	7	1.6	546	21	B32532	S. lavendulae MmcS
148	7	1.6	564	20	Y35183	C. pneumoniae prot
149	7	1.6	575	20	Y05659	Maize 4-coumarate:
150	7	1.6	669	21	B44565	Virulence gene pro
151	7	1.6	699	21	B03445	Candida albicans e
152	7	1.6	798	21	Y52699	Aspergillus oryzae
153	7	1.6	823	21	B25548	Eucalyptus grandis
154	7	1.6	880	21	Y44638	N. meningitidis T-
155	7	1.6	1346	21	B18640	Amino acid sequenc
156	7	1.6	1346	21	Y77195	S. venezuelae macr
157	7	1.6	1346	21	Y77203	S. venezuelae pik
158	7	1.6	1346	21	Y67204	Narbonolide syntha
159	7	1.6	2204	21	Y51233	Newcastle disease
160	7	1.6	2972	21	B09265	Hepatitis GB virus
161	7	1.6	3054	14	R40841	Translation of TEV
162	7	1.6	3163	16	R94347	Hepatitis GB virus
163	7	1.6	12199	21	Y77180	S. venezuelae pik
164	6	1.4	7	11	R06789	Tumour necrosis fa
165	6	1.4	9	18	W08976	Conserved epitope
166	6	1.4	9	19	W54140	H. influenzae Tbp2
167	6	1.4	9	21	Y51796	H. influenzae tran
168	6	1.4	9	21	Y80384	H. influenzae tran
169	6	1.4	12	22	B50948	ADAM gene #3 pepti
170	6	1.4	12	22	B50949	ADAM gene #4 pepti
171	6	1.4	13	22	B57731	D.teissieri IDM pe
172	6	1.4	14	20	Y03166	Linker used in Chi
173	6	1.4	15	21	Y67030	B.lentus protease
174	6	1.4	15	21	Y67031	B.lentus protease
175	6	1.4	15	21	Y67032	B.lentus protease
176	6	1.4	15	21	Y67033	B.lentus protease
177	6	1.4	15	21	Y54667	B. lentus protease
178	6	1.4	15	21	Y54668	B. lentus protease
179	6	1.4	15	21	Y54669	B. lentus protease
180	6	1.4	15	21	Y54670	B. lentus protease
181	6	1.4	19	19	W42166	T-cell epitope pep
182	6	1.4	19	21	B63161	Human secreted pro
183	6	1.4	19	21	Y56549	Rat hormone sensit
184	6	1.4	20	16	R86357	HIV-1 protease inh
185	6	1.4	20	18	W29202	Soluble I-As beta-
186	6	1.4	20	19	W42167	T-cell epitope pep
187	6	1.4	20	20	Y36563	Fragment of human
188	6	1.4	20	20	Y04723	Sindbis virus PE2
189	6	1.4	21	19	W51086	Synthetic VSP lead
190	6	1.4	21	20	Y04722	Sindbis virus PE2
191	6	1.4	21	21	B10453	Tryptic peptide SE
192	6	1.4	24	20	Y19705	SEQ ID NO 423 from
193	6	1.4	24	20	W74457	Fibroblast growth
194	6	1.4	24	21	Y90893	Fibroblast growth
195	6	1.4	25	19	W63011	Mouse dectin-1 tra
196	6	1.4	25	20	W74456	Fibroblast growth
197	6	1.4	25	21	Y90880	Fibroblast growth
198	6	1.4	26	18	W29198	Soluble HLA-DR1 be
199	6	1.4	26	20	Y04714	Sindbis virus PE2
200	6	1.4	26	20	Y04717	Sindbis virus PE2
201	6	1.4	27	20	Y04716	Sindbis virus PE2
202	6	1.4	28	20	Y04715	Sindbis virus PE2
203	6	1.4	30	16	R85060	Peptide rI from th
204	6	1.4	32	12	R13836	Mutant signal pept
205	6	1.4	35	20	Y49749	Compact structure
206	6	1.4	36	21	G13150	Arabidopsis thalia
207	6	1.4	36	21	Y54262	Insert of a cleava
208	6	1.4	37	21	G25043	Arabidopsis thalia
209	6	1.4	37	22	B48744	Mouse liver growth
210	6	1.4	39	16	R84655	STLVpan-p rex prot
211	6	1.4	39	21	G13149	Arabidopsis thalia
212	6	1.4	41	20	Y19514	Amino acid sequenc
213	6	1.4	41	20	Y11415	Human 5' EST secre
214	6	1.4	42	21	G57021	Arabidopsis thalia
215	6	1.4	44	19	W79339	Staphylococcus aur
216	6	1.4	46	18	W16397	HSV-1 glycoprotein
217	6	1.4	47	20	Y41497	Fragment of human
218	6	1.4	53	20	Y02934	Fragment of human
219	6	1.4	53	21	G02500	Human secreted pro
220	6	1.4	56	17	W03586	Human beta 1 adren
221	6	1.4	57	20	Y12337	Human 5' EST secre
222	6	1.4	63	19	W69187	Precursor sequence
223	6	1.4	63	20	Y24142	Conus purpurascens
224	6	1.4	63	20	Y24144	Conus textile cont
225	6	1.4	63	20	Y24145	Conus textile cont
226	6	1.4	63	20	Y24146	Conus marmoreus co
227	6	1.4	63	20	Y24147	Conus radiatus con
228	6	1.4	63	20	Y24141	Conus stercusmusca
229	6	1.4	63	21	G57761	Arabidopsis thalia
230	6	1.4	64	21	G27549	Arabidopsis thalia

231	6	1.4	65	21	G19779	Arabidopsis thalia
232	6	1.4	68	20	Y36562	Fragment of human
233	6	1.4	68	21	G00159	Human secreted pro
234	6	1.4	69	21	B08914	Human secreted pro
235	6	1.4	70	20	Y28573	Secreted peptide c
236	6	1.4	70	20	Y35938	Extended human sec
237	6	1.4	70	21	G50362	Arabidopsis thalia
238	6	1.4	71	21	G37104	Arabidopsis thalia
239	6	1.4	71	21	G00587	Human secreted pro
240	6	1.4	72	20	Y12824	Human 5' EST secre
241	6	1.4	73	20	Y24123	Conopeptide propep
242	6	1.4	74	21	G24066	Arabidopsis thalia
243	6	1.4	74	21	G35084	Arabidopsis thalia
244	6	1.4	74	21	G36062	Zea mays protein f
245	6	1.4	74	21	Y64696	Human 5' EST relat
246	6	1.4	75	21	Y56448	Escherichia coli y
247	6	1.4	77	19	W71067	Multiple sclerosis
248	6	1.4	77	20	W99552	Protein encoded by
249	6	1.4	77	21	G27548	Arabidopsis thalia
250	6	1.4	77	21	G50361	Arabidopsis thalia
251	6	1.4	78	20	W88658	Secreted protein e
252	6	1.4	78	21	G37109	Arabidopsis thalia
253	6	1.4	79	16	R82568	Pig leukocyte prop
254	6	1.4	79	16	R82569	Pig leukocyte prop
255	6	1.4	81	20	Y24118	Conopeptide propep
256	6	1.4	81	21	B08957	Human secreted pro
257	6	1.4	83	21	B42844	Human ORFX ORF2608
258	6	1.4	83	21	G57760	Arabidopsis thalia
259	6	1.4	84	20	Y04950	Mycobacterium spec
260	6	1.4	84	21	G25192	Arabidopsis thalia
261	6	1.4	85	21	G12752	Arabidopsis thalia
262	6	1.4	90	21	G08931	Arabidopsis thalia
263	6	1.4	90	21	G23079	Arabidopsis thalia
264	6	1.4	92	19	Y20611	Human neurofilamen
265	6	1.4	92	19	W75161	Human secreted pro
266	6	1.4	92	20	Y59689	Secreted protein 2
267	6	1.4	92	20	Y48331	Human prostate can
268	6	1.4	92	20	Y24749	Human phospholemma
269	6	1.4	92	20	W92960	Human PLM protein.
270	6	1.4	92	21	G55682	Arabidopsis thalia
271	6	1.4	92	21	G60762	Arabidopsis thalia
272	6	1.4	92	21	G60780	Arabidopsis thalia
273	6	1.4	93	19	W75106	Human secreted pro
274	6	1.4	95	21	G02275	Human secreted pro
275	6	1.4	96	21	G27146	Zea mays protein f
276	6	1.4	98	20	Y14417	Human secreted pro
277	6	1.4	98	21	B40959	Human ORFX ORF723
278	6	1.4	99	21	G40951	Zea mays protein f
279	6	1.4	100	21	B54073	Human pancreatic c
280	6	1.4	100	21	B42296	Human ORFX ORF2060
281	6	1.4	101	19	W68478	HIV-1 strain YBF30
282	6	1.4	102	20	Y04951	Mycobacterium spec
283	6	1.4	102	21	B24654	Plant SDF encoded
284	6	1.4	102	21	B24795	Plant SDF encoded
285	6	1.4	102	21	G03918	Human secreted pro
286	6	1.4	103	21	B53957	Human colon cancer
287	6	1.4	103	21	G03800	Human secreted pro
288	6	1.4	104	19	Y85927	S. pneumoniae deri
289	6	1.4	104	21	B40356	Human ORFX ORF120
290	6	1.4	105	21	G03964	Human secreted pro
291	6	1.4	106	19	W77533	Staphylococcus aur
292	6	1.4	106	21	B43040	Human ORFX ORF2804
293	6	1.4	107	21	G05428	Arabidopsis thalia
294	6	1.4	107	21	G40881	Zea mays protein f
295	6	1.4	108	20	W86258	Maize OTE partial
296	6	1.4	108	21	B40399	Human ORFX ORF163.
297	6	1.4	108	21	G60761	Arabidopsis thalia
298	6	1.4	109	18	W20784	H. pylori secreted
299	6	1.4	109	21	G35617	Arabidopsis thalia
300	6	1.4	109	21	G03365	Human secreted pro
301	6	1.4	110	21	B40871	Human ORFX ORF635
302	6	1.4	110	21	B24653	Plant SDF encoded
303	6	1.4	110	21	B24794	Plant SDF encoded
304	6	1.4	111	21	G25191	Arabidopsis thalia
305	6	1.4	111	21	Y83911	Myc homology regio
306	6	1.4	112	21	G35616	Arabidopsis thalia
307	6	1.4	113	21	G00281	Human secreted pro
308	6	1.4	114	21	G04648	Arabidopsis thalia
309	6	1.4	115	11	R04930	Interferon-gamma r
310	6	1.4	115	21	B33254	Eucalyptus grandis
311	6	1.4	115	21	G41132	Zea mays protein f
312	6	1.4	116	21	G25340	Arabidopsis thalia
313	6	1.4	116	21	G36061	Zea mays protein f
314	6	1.4	116	21	G37183	Arabidopsis thalia
315	6	1.4	117	21	G27666	Arabidopsis thalia
316	6	1.4	118	21	B40822	Human ORFX ORF586
317	6	1.4	119	21	G23078	Arabidopsis thalia
318	6	1.4	119	21	G55681	Arabidopsis thalia
319	6	1.4	119	21	G60779	Arabidopsis thalia
320	6	1.4	121	21	G19868	Arabidopsis thalia
321	6	1.4	121	21	G40531	Arabidopsis thalia
322	6	1.4	121	21	G58546	Arabidopsis thalia
323	6	1.4	124	21	B56083	Human secreted pro
324	6	1.4	124	21	G00383	Human secreted pro
325	6	1.4	125	20	Y04856	Mycobacterium spec
326	6	1.4	125	21	B19079	Amino acid sequenc
327	6	1.4	125	21	G25999	Zea mays protein f
328	6	1.4	125	21	G30135	Arabidopsis thalia
329	6	1.4	125	21	Y90921	Cenarchaeum symbio
330	6	1.4	125	21	Y90937	Cenarchaeum symbio
331	6	1.4	125	22	B64713	Human secreted pro
332	6	1.4	126	18	W55615	H. pylori ORF hp5p
333	6	1.4	126	21	G25998	Zea mays protein f
334	6	1.4	126	21	Y75628	Neisseria gonorrhe
335	6	1.4	127	20	Y13140	Human secreted pro
336	6	1.4	128	20	Y34817	Chlamydia pneumoni
337	6	1.4	128	20	Y12277	Human 5' EST secre
338	6	1.4	128	21	G55489	Arabidopsis thalia
339	6	1.4	129	21	G05427	Arabidopsis thalia
340	6	1.4	129	21	G08102	Arabidopsis thalia
341	6	1.4	129	21	G27570	Arabidopsis thalia
342	6	1.4	130	18	W11768	Early onset Alzhei
343	6	1.4	130	20	Y04853	Mycobacterium spec
344	6	1.4	130	21	G27088	Zea mays protein f
345	6	1.4	131	18	W28313	Amino acid sequenc
346	6	1.4	131	20	Y19704	SEQ ID NO 422 from
347	6	1.4	131	21	B41642	Human ORFX ORF1406
348	6	1.4	132	21	G16210	Arabidopsis thalia
349	6	1.4	132	21	G23077	Arabidopsis thalia
350	6	1.4	134	21	G24064	Arabidopsis thalia
351	6	1.4	135	21	G35181	Zea mays protein f
352	6	1.4	135	21	G43791	Arabidopsis thalia
353	6	1.4	136	21	G45795	Arabidopsis thalia
354	6	1.4	137	21	G55488	Arabidopsis thalia
355	6	1.4	138	21	G50360	Arabidopsis thalia
356	6	1.4	138	21	G55487	Arabidopsis thalia
357	6	1.4	139	21	G09488	Arabidopsis thalia
358	6	1.4	139	21	G12067	Arabidopsis thalia
359	6	1.4	139	21	G39863	Arabidopsis thalia
360	6	1.4	140	21	G41098	Zea mays protein f
361	6	1.4	142	21	B56239	Human secreted pro
362	6	1.4	143	18	W28115	Staphylococcus aur
363	6	1.4	143	21	B36180	Mouse partial seve
364	6	1.4	143	21	G41131	Zea mays protein f
365	6	1.4	143	21	Y64663	Human 5' EST relat
366	6	1.4	144	21	G09487	Arabidopsis thalia
367	6	1.4	145	19	W52811	Human DBI/ACBP -li
368	6	1.4	145	21	B32749	Eucalyptus grandis
369	6	1.4	145	21	G26860	Zea mays protein f
370	6	1.4	146	14	R38158	ORF438 product. S
371	6	1.4	146	21	G27665	Arabidopsis thalia
372	6	1.4	146	21	G35180	Zea mays protein f
373	6	1.4	146	21	Y92717	ORF-438 protein.
374	6	1.4	147	21	B33253	Eucalyptus grandis
375	6	1.4	147	21	G05426	Arabidopsis thalia
376	6	1.4	147	21	G27569	Arabidopsis thalia

377	6	1.4	147	21	G32496	Arabidopsis thalia
378	6	1.4	148	21	B40695	Human ORFX ORF459
379	6	1.4	148	21	B42045	Human ORFX ORF1809
380	6	1.4	148	21	G23469	Arabidopsis thalia
381	6	1.4	148	21	G39274	Arabidopsis thalia
382	6	1.4	149	6	P50064	Soybean heat shock
383	6	1.4	150	21	G32495	Arabidopsis thalia
384	6	1.4	151	21	G23468	Arabidopsis thalia
385	6	1.4	151	21	G25997	Zea mays protein f
386	6	1.4	151	21	G39273	Arabidopsis thalia
387	6	1.4	151	21	Y32294	Corn anti-silencin
388	6	1.4	156	21	G23166	Arabidopsis thalia
389	6	1.4	157	21	B11677	A. vitis hypersens
390	6	1.4	158	21	G26858	Zea mays protein f
391	6	1.4	160	18	W55455	H. pylori ORF 02gp
392	6	1.4	160	19	W76620	MCV (160L) protein
393	6	1.4	160	19	W72036	HSV-2 strain SB5 C
394	6	1.4	160	21	G23657	Arabidopsis thalia
395	6	1.4	162	18	W55274	H. pylori ORF 09ge
396	6	1.4	162	19	W69220	Human oncogene ind
397	6	1.4	162	20	Y35340	Amino acid sequenc
398	6	1.4	162	20	Y13933	Human OHP106 prote
399	6	1.4	162	21	Y84000	Human B-cell surfa
400	6	1.4	162	21	Y77476	Human MD-1 protein
401	6	1.4	163	18	W55291	H. pylori ORF 14ce
402	6	1.4	163	20	Y41233	A. chroococcum YH2
403	6	1.4	163	21	G46201	Arabidopsis thalia
404	6	1.4	164	21	B25282	Eucalyptus grandis
405	6	1.4	164	21	G26060	Zea mays protein f
406	6	1.4	164	21	G40880	Zea mays protein f
407	6	1.4	166	19	W75785	Human lymphocyte s
408	6	1.4	167	21	G26859	Zea mays protein f
409	6	1.4	168	19	W40413	Bovine NOS flavodo
410	6	1.4	168	21	G19867	Arabidopsis thalia
411	6	1.4	168	21	G40530	Arabidopsis thalia
412	6	1.4	169	15	R62759	TctB sequence. Sa
413	6	1.4	169	18	W23580	Salmonella enterit
414	6	1.4	170	21	Y41299	Neisseria chimeric
415	6	1.4	171	18	W23010	Canine herpesvirus
416	6	1.4	171	19	W72666	Canine herpes viru
417	6	1.4	171	20	W88755	Secreted protein e
418	6	1.4	172	21	G06271	Arabidopsis thalia
419	6	1.4	172	21	G54594	Zea mays protein f
420	6	1.4	172	21	G58325	Arabidopsis thalia
421	6	1.4	172	21	G61127	Arabidopsis thalia
422	6	1.4	173	21	G06270	Arabidopsis thalia
423	6	1.4	173	21	G58324	Arabidopsis thalia
424	6	1.4	173	21	G61126	Arabidopsis thalia
425	6	1.4	174	21	B08458	Amino acid sequenc
426	6	1.4	175	21	G23165	Arabidopsis thalia
427	6	1.4	176	21	G11337	Arabidopsis thalia
428	6	1.4	180	21	G30134	Arabidopsis thalia
429	6	1.4	180	21	Y92351	Human vasostatin (
430	6	1.4	183	21	G08021	Arabidopsis thalia
431	6	1.4	183	21	G23656	Arabidopsis thalia
432	6	1.4	183	21	G46541	Arabidopsis thalia
433	6	1.4	183	21	Y97829	Pseudomonas sp. WF
434	6	1.4	184	18	W32085	Non-glycosylated T
435	6	1.4	184	21	B54285	Human pancreatic c
436	6	1.4	185	15	R47115	Toxoplasma GP28.5
437	6	1.4	185	20	W82004	Human adult testis
438	6	1.4	185	21	G15678	Arabidopsis thalia
439	6	1.4	185	21	G18195	Arabidopsis thalia
440	6	1.4	185	21	G25339	Arabidopsis thalia
441	6	1.4	185	21	G27568	Arabidopsis thalia
442	6	1.4	185	21	G37182	Arabidopsis thalia
443	6	1.4	185	21	G39030	Arabidopsis thalia
444	6	1.4	185	21	G55052	Arabidopsis thalia
445	6	1.4	185	21	G58323	Arabidopsis thalia
446	6	1.4	186	21	B52072	Gene 8 human secre
447	6	1.4	187	21	G11336	Arabidopsis thalia
448	6	1.4	187	21	G37074	Arabidopsis thalia
449	6	1.4	187	21	G52578	Arabidopsis thalia
450	6	1.4	189	21	B32022	Human secreted pro
451	6	1.4	190	21	G52577	Arabidopsis thalia
452	6	1.4	191	21	G37073	Arabidopsis thalia
453	6	1.4	192	21	G46200	Arabidopsis thalia
454	6	1.4	193	21	G37400	Arabidopsis thalia
455	6	1.4	193	21	G37422	Arabidopsis thalia
456	6	1.4	194	20	Y49916	Human blood myocar
457	6	1.4	194	21	Y86471	Human gene 51-enco
458	6	1.4	195	10	P91391	Human ventricular
459	6	1.4	195	10	P90745	Recombinant human
460	6	1.4	196	19	Y86067	S. pneumoniae deri
461	6	1.4	197	21	G19889	Arabidopsis thalia
462	6	1.4	197	21	G48658	Arabidopsis thalia
463	6	1.4	198	10	P90420	Header sequence of
464	6	1.4	198	16	R65214	Small replicase of
465	6	1.4	198	21	Y56402	Escherichia coli y
466	6	1.4	199	19	W63016	Mouse dectin-1 iso
467	6	1.4	199	21	Y92367	Rhodopsin-like G p
468	6	1.4	199	21	Y32397	Human immunomodula
469	6	1.4	199	22	B50969	Human PRO3438 prot
470	6	1.4	202	21	Y76136	Human secreted pro
471	6	1.4	203	17	W04546	Mature human CD16-
472	6	1.4	203	21	G08020	Arabidopsis thalia
473	6	1.4	203	21	G46540	Arabidopsis thalia
474	6	1.4	205	20	Y41495	Fragment of human
475	6	1.4	205	21	B39146	Human secreted pro
476	6	1.4	206	21	G11335	Arabidopsis thalia
477	6	1.4	206	21	G19888	Arabidopsis thalia
478	6	1.4	206	21	G48657	Arabidopsis thalia
479	6	1.4	207	21	B58590	N. meningitidis am
480	6	1.4	207	21	B25660	N. meningitidis am
481	6	1.4	207	21	Y75629	Neisseria meningit
482	6	1.4	207	21	Y75630	Neisseria meningit
483	6	1.4	208	15	R51896	Chitin binding pro
484	6	1.4	208	22	B50938	ADAM protein #4.
485	6	1.4	209	21	G46199	Arabidopsis thalia
486	6	1.4	211	15	R51897	Chitin binding pro
487	6	1.4	211	21	B58314	Lung cancer associ
488	6	1.4	212	15	R61123	Soluble human Fc g
489	6	1.4	212	17	W06825	Turkey herpes viru
490	6	1.4	212	21	G37398	Arabidopsis thalia
491	6	1.4	212	21	G37420	Arabidopsis thalia
492	6	1.4	212	21	Y70472	Human p53 target m
493	6	1.4	213	21	B42818	Human ORFX ORF2582
494	6	1.4	214	22	B50041	Rat alphal integri
495	6	1.4	214	22	B50042	Human alphal integ
496	6	1.4	216	16	R75904	Human olfactory re
497	6	1.4	216	19	W41154	RBE1 transcription
498	6	1.4	216	20	Y27778	Human secreted pro
499	6	1.4	216	21	G30318	Arabidopsis thalia
500	6	1.4	216	21	G51491	Arabidopsis thalia
501	6	1.4	217	20	W97729	Corn diaminopimela
502	6	1.4	217	21	G30317	Arabidopsis thalia
503	6	1.4	217	21	G51490	Arabidopsis thalia
504	6	1.4	218	20	W82691	P. sulcata type I
505	6	1.4	218	21	G15988	Arabidopsis thalia
506	6	1.4	219	19	W72890	Mycobacterium tube
507	6	1.4	219	20	Y21907	Amino acid sequenc
508	6	1.4	219	20	Y04859	Mycobacterium spec
509	6	1.4	219	20	W82703	U. florida type I
510	6	1.4	219	21	B43594	Human cancer assoc
511	6	1.4	219	21	B08662	A monkey neutrokin
512	6	1.4	219	21	B08663	A monkey neutrokin
513	6	1.4	219	21	G55035	Arabidopsis thalia
514	6	1.4	219	22	B52453	Mycobacterium tube
515	6	1.4	220	21	B32746	Eucalyptus grandis
516	6	1.4	222	19	W40074	Human eosinophil g
517	6	1.4	222	21	G12066	Arabidopsis thalia
518	6	1.4	222	21	G39862	Arabidopsis thalia
519	6	1.4	223	21	G19887	Arabidopsis thalia
520	6	1.4	223	21	G29539	Arabidopsis thalia
521	6	1.4	223	21	G48656	Arabidopsis thalia
522	6	1.4	224	18	W09640	Murine cytokine, S

523	6	1.4	224	19	W73017	Human cysteine-ric
524	6	1.4	224	20	Y29198	Amino acid sequenc
525	6	1.4	224	21	B08875	Amino acid sequenc
526	6	1.4	224	21	G19866	Arabidopsis thalia
527	6	1.4	224	21	G40529	Arabidopsis thalia
528	6	1.4	224	21	Y92075	Human DKR-4. Homo
529	6	1.4	224	21	Y86197	Nuclear transport
530	6	1.4	225	21	G08101	Arabidopsis thalia
531	6	1.4	227	18	W09639	Human cytokine, ST
532	6	1.4	228	19	W98418	H. pylori GHPO 319
533	6	1.4	228	20	Y37155	Amino acid sequenc
534	6	1.4	229	21	G21063	Arabidopsis thalia
535	6	1.4	231	21	G28290	Arabidopsis thalia
536	6	1.4	233	10	P91540	Fc-gamma-RIII enco
537	6	1.4	233	18	W29239	Human Fc-gamma rec
538	6	1.4	233	21	B53474	Human colon cancer
539	6	1.4	233	21	G44496	Arabidopsis thalia
540	6	1.4	233	21	Y96229	Human Fc receptor,
541	6	1.4	234	21	G28835	Arabidopsis thalia
542	6	1.4	234	22	B65699	Novel protein kina
543	6	1.4	238	21	B43543	Human cancer assoc
544	6	1.4	239	21	G15677	Arabidopsis thalia
545	6	1.4	240	19	Y86025	S. pneumoniae deri
546	6	1.4	240	21	B26845	Sakuranetin syntha
547	6	1.4	240	21	G16761	Arabidopsis thalia
548	6	1.4	241	21	Y75684	Neisseria gonorrhe
549	6	1.4	241	22	B50360	Maize ZmGnsN4 gluc
550	6	1.4	242	21	G28289	Arabidopsis thalia
551	6	1.4	242	21	Y75685	Neisseria meningit
552	6	1.4	242	21	Y75686	Neisseria meningit
553	6	1.4	243	21	G19694	Arabidopsis thalia
554	6	1.4	243	21	G42021	Arabidopsis thalia
555	6	1.4	243	21	G50220	Arabidopsis thalia
556	6	1.4	244	19	W63009	Mouse dectin-1. M
557	6	1.4	244	21	G06211	Arabidopsis thalia
558	6	1.4	245	21	G29538	Arabidopsis thalia
559	6	1.4	246	21	G16760	Arabidopsis thalia
560	6	1.4	247	19	W72384	Pathogen response
561	6	1.4	247	21	B32744	Eucalyptus grandis
562	6	1.4	247	21	Y93998	Human BR43x2, an i
563	6	1.4	247	21	G39861	Arabidopsis thalia
564	6	1.4	248	21	G12065	Arabidopsis thalia
565	6	1.4	249	20	Y09369	Human tumour necro
566	6	1.4	249	21	B07526	Amino acid sequenc
567	6	1.4	249	21	Y95338	Human PRO207 antit
568	6	1.4	249	22	B19896	Polyketide synthas
569	6	1.4	250	21	G20061	Arabidopsis thalia
570	6	1.4	250	21	G30316	Arabidopsis thalia
571	6	1.4	250	21	G43790	Arabidopsis thalia
572	6	1.4	250	21	G51489	Arabidopsis thalia
573	6	1.4	251	20	Y37487	Amino acid sequenc
574	6	1.4	251	21	G44495	Arabidopsis thalia
575	6	1.4	252	18	W32084	Non-glycosylated T
576	6	1.4	252	18	W32083	Amino acid sequenc
577	6	1.4	252	18	W36012	Toxoplasma gondii
578	6	1.4	252	18	W18315	Toxoplasma gondii
579	6	1.4	253	20	W86370	Hampshire alpha me
580	6	1.4	253	20	W86371	Duroc alpha melano
581	6	1.4	253	20	W86366	Wild boar alpha me
582	6	1.4	253	20	W86367	Meishan alpha mela
583	6	1.4	253	20	W86369	Large White alpha-
584	6	1.4	253	21	G29537	Arabidopsis thalia
585	6	1.4	254	10	P91541	Sequence of Fc-gam
586	6	1.4	254	17	W04541	Human CD16-II vari
587	6	1.4	254	17	W04542	Human CD16-II vari
588	6	1.4	254	17	W04543	Human CD16-II vari
589	6	1.4	254	17	W04544	Human CD16-II vari
590	6	1.4	254	18	W29240	Human variant Fc-g
591	6	1.4	254	21	B58258	Lung cancer associ
592	6	1.4	255	18	W20529	H. pylori secreted
593	6	1.4	255	21	B08471	Amino acid sequenc
594	6	1.4	256	21	B58956	Breast and ovarian
595	6	1.4	257	19	W37977	Kaposi's sarcoma a
596	6	1.4	257	20	W88706	Secreted protein e
597	6	1.4	257	21	G43780	Arabidopsis thalia
598	6	1.4	257	21	Y87870	M. tuberculosis an
599	6	1.4	258	21	Y75515	Neisseria gonorrhe
600	6	1.4	258	21	Y75516	Neisseria meningit
601	6	1.4	258	21	Y75517	Neisseria meningit
602	6	1.4	259	21	G07206	Arabidopsis thalia
603	6	1.4	262	19	W72114	HSV-2 strain SB5 C
604	6	1.4	265	20	Y17100	B. lentus subtilis
605	6	1.4	265	20	Y16768	Bacillus lentus su
606	6	1.4	265	20	Y16770	Bacillus lentus su
607	6	1.4	266	20	Y34730	Chlamydia pneumoni
608	6	1.4	267	19	W81726	M. tuberculosis im
609	6	1.4	267	19	W64359	Mycobacterium tube
610	6	1.4	267	20	Y39156	M. tuberculosis an
611	6	1.4	267	20	Y39013	M. tuberculosis re
612	6	1.4	268	19	W62223	Subtilase BYSYAB f
613	6	1.4	268	19	W62227	Subtilase BLSAVI f
614	6	1.4	268	20	Y24909	Bacillus subtilis
615	6	1.4	268	20	Y21647	Subtilase BYSYAB.
616	6	1.4	269	10	P90374	Subtilisin 309 fro
617	6	1.4	269	12	R11190	Pre-pro alkaline p
618	6	1.4	269	12	R10444	S004 mutant of the
619	6	1.4	269	12	R10445	S014 mutant of the
620	6	1.4	269	12	R10446	S020 mutant of the
621	6	1.4	269	12	R10447	S204 mutant of the
622	6	1.4	269	12	R10448	S224 mutant of the
623	6	1.4	269	12	R10449	S234 mutant of the
624	6	1.4	269	12	R11386	N18K mature highly
625	6	1.4	269	12	R11387	K27R mature highly
626	6	1.4	269	12	R11388	N42R mature highly
627	6	1.4	269	12	R11389	Q57R mature highly
628	6	1.4	269	12	R11390	A96R mature highly
629	6	1.4	269	12	R11391	Q107R mature highl
630	6	1.4	269	12	R11392	N114R mature highl
631	6	1.4	269	12	R11393	N115R mature highl
632	6	1.4	269	12	R11394	Q135R mature highl
633	6	1.4	269	12	R11395	N138R mature highl
634	6	1.4	269	12	R11396	A166R mature highl
635	6	1.4	269	12	R11397	V238R mature highl
636	6	1.4	269	12	R11398	N255R mature highl
637	6	1.4	269	12	R11399	S259K mature highl
638	6	1.4	269	12	R11400	A266R mature highl
639	6	1.4	269	12	R12118	Carbonyl hydrolase
640	6	1.4	269	13	R28336	Subtilisin 309 (wi
641	6	1.4	269	13	R32321	Subtilisin 309 mut
642	6	1.4	269	13	R28378	Subtilisin 309. S
643	6	1.4	269	13	R28379	Mutant subtilisin
644	6	1.4	269	13	R29594	Mutant subtilisin
645	6	1.4	269	13	R29595	Mutant subtilisin
646	6	1.4	269	13	R28380	Mutant subtilisin
647	6	1.4	269	13	R28381	Mutant subtilisin
648	6	1.4	269	13	R25539	Subtilisin proteas
649	6	1.4	269	13	R29596	Mutant subtilisin
650	6	1.4	269	13	R25540	Subtilisin proteas
651	6	1.4	269	13	R29597	Mutant subtilisin
652	6	1.4	269	13	R25541	Subtilisin proteas
653	6	1.4	269	13	R28382	Mutant subtilisin
654	6	1.4	269	13	R25538	Subtilisin proteas
655	6	1.4	269	13	R25542	Subtilisin proteas
656	6	1.4	269	13	R25543	Subtilisin proteas
657	6	1.4	269	13	R29598	Mutant subtilisin
658	6	1.4	269	13	R25544	Subtilisin proteas
659	6	1.4	269	13	R25545	Subtilisin proteas
660	6	1.4	269	13	R29599	Mutant subtilisin
661	6	1.4	269	13	R25546	Subtilisin proteas
662	6	1.4	269	13	R25547	Subtilisin proteas
663	6	1.4	269	13	R29600	Mutant subtilisin
664	6	1.4	269	13	R25548	Subtilisin proteas
665	6	1.4	269	13	R29601	Mutant subtilisin
666	6	1.4	269	13	R25549	Subtilisin proteas
667	6	1.4	269	13	R25550	Subtilisin proteas
668	6	1.4	269	13	R25551	Subtilisin proteas

669	6	1.4	269	13	R25553	Subtilisin proteas
670	6	1.4	269	13	R25552	Subtilisin proteas
671	6	1.4	269	13	R29602	Mutant subtilisin
672	6	1.4	269	13	R25555	Subtilisin proteas
673	6	1.4	269	13	R25554	Subtilisin proteas
674	6	1.4	269	13	R29603	Mutant subtilisin
675	6	1.4	269	13	R29604	Mutant subtilisin
676	6	1.4	269	13	R25556	Subtilisin proteas
677	6	1.4	269	13	R25557	Subtilisin proteas
678	6	1.4	269	13	R28383	Mutant subtilisin
679	6	1.4	269	13	R25558	Subtilisin proteas
680	6	1.4	269	13	R25559	Subtilisin proteas
681	6	1.4	269	13	R29605	Mutant subtilisin
682	6	1.4	269	13	R25560	Subtilisin proteas
683	6	1.4	269	13	R25561	Subtilisin proteas
684	6	1.4	269	13	R25562	Subtilisin proteas
685	6	1.4	269	13	R28384	Mutant subtilisin
686	6	1.4	269	13	R28385	Mutant subtilisin
687	6	1.4	269	13	R28386	Mutant subtilisin
688	6	1.4	269	13	R28387	Mutant subtilisin
689	6	1.4	269	13	R28388	Mutant subtilisin
690	6	1.4	269	13	R28389	Mutant subtilisin
691	6	1.4	269	13	R28390	Mutant subtilisin
692	6	1.4	269	13	R28303	Subtilisin-309 - c
693	6	1.4	269	13	R31430	Ref. subtilisin fo
694	6	1.4	269	13	R30114	BLAP (H243A). Bac
695	6	1.4	269	13	R30091	BLAP (S3T, V4I, A1
696	6	1.4	269	13	R30092	BLAP (S3T, A188P,
697	6	1.4	269	13	R30093	BLAP (V4I, A188P,
698	6	1.4	269	13	R30094	BLAP (S139Y, A188P
699	6	1.4	269	13	R30095	BLAP (S130T, S139Y
700	6	1.4	269	13	R30096	BLAP (A188P, V193M
701	6	1.4	269	13	R30097	BLAP (S3T, A188P,
702	6	1.4	269	13	R30098	BLAP (S157T). Bac
703	6	1.4	269	13	R30099	BLAP (A188P, V139M
704	6	1.4	269	13	R30100	BLAP (A188P). Bac
705	6	1.4	269	13	R30101	BLAP (S3T, V4I, A1
706	6	1.4	269	13	R30102	BLAP (V193M). Bac
707	6	1.4	269	13	R30103	BLAP (S104T). Bac
708	6	1.4	269	13	R30104	BLAP (T69VT). Bac
709	6	1.4	269	13	R30105	BLAP (V4I, A188P,
710	6	1.4	269	13	R30106	BLAP (A224V). Bac
711	6	1.4	269	13	R30107	BLAP (V199I). Bac
712	6	1.4	269	13	R30108	BLAP (V4I). Bacil
713	6	1.4	269	13	R30109	BLAP (S3T). Bacil
714	6	1.4	269	13	R30110	BLAP (S139Y). Bac
715	6	1.4	269	13	R30111	BLAP (N242A). Bac
716	6	1.4	269	13	R30112	BLAP (S236T). Bac
717	6	1.4	269	13	R30113	BLAP (S36A). Baci
718	6	1.4	269	13	R30115	BLAP (A101T). Bac
719	6	1.4	269	13	R30116	BLAP (S236A). Bac
720	6	1.4	269	13	R30117	BLAP (E87R). Baci
721	6	1.4	269	13	R30118	BLAP (N114S). Bac
722	6	1.4	269	13	R30119	BLAP (A47W). Baci
723	6	1.4	269	13	R30120	BLAP (A120S). Bac
724	6	1.4	269	13	R30121	BLAP (T56V). Baci
725	6	1.4	269	13	R30122	BLAP (A120V). Bac
726	6	1.4	269	13	R30123	BLAP (G205V). Bac
727	6	1.4	269	13	R30124	BLAP (S130A). Bac
728	6	1.4	269	13	R30125	BLAP (S130T). Bac
729	6	1.4	269	13	R30126	BLAP (A96I). Baci
730	6	1.4	269	13	R30127	BLAP (S104T, S139Y
731	6	1.4	269	13	R30128	BLAP (S139A). Bac
732	6	1.4	269	13	R30129	BLAP (S142T). Bac
733	6	1.4	269	13	R30130	BLAP (S139T). Bac
734	6	1.4	269	13	R30131	BLAP (I102W). Bac
735	6	1.4	269	13	R30132	BLAP (A96N). Baci
736	6	1.4	269	13	R30133	BLAP (N42F). Baci
737	6	1.4	269	13	R30134	BLAP (S142A). Bac
738	6	1.4	269	13	R30135	BLAP (H118F). Bac
739	6	1.4	269	13	R30136	BLAP (N237A). Bac
740	6	1.4	269	13	R30137	BLAP (N255P). Bac
741	6	1.4	269	13	R30138	BLAP (T141W, N237A
742	6	1.4	269	13	R30139	BLAP (T268V). Bac
743	6	1.4	269	13	R30140	BLAP (K229W). Bac
744	6	1.4	269	13	R30141	BLAP (T141W). Bac
745	6	1.4	269	13	R30142	BLAP (wildtype).
746	6	1.4	269	14	R43047	Mutant PB92 serine
747	6	1.4	269	14	R43048	Mutant PB92 serine
748	6	1.4	269	14	R43049	Mutant PB92 serine
749	6	1.4	269	14	R43050	Mutant PB92 serine
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751	6	1.4	269	14	R43052	Mutant PB92 serine
752	6	1.4	269	14	R43053	Mutant PB92 serine
753	6	1.4	269	14	R43054	Mutant PB92 serine
754	6	1.4	269	14	R43055	Mutant PB92 serine
755	6	1.4	269	14	R43056	Mutant PB92 serine
756	6	1.4	269	14	R43057	Mutant PB92 serine
757	6	1.4	269	14	R43058	Mutant PB92 serine
758	6	1.4	269	14	R43059	Mutant PB92 serine
759	6	1.4	269	15	R46301	WT PB92 serine pro
760	6	1.4	269	15	R46302	WT Subtilisin 309
761	6	1.4	269	15	R46303	PB92 serine protea
762	6	1.4	269	15	R46304	Subtilisin 309 Ser
763	6	1.4	269	15	R46305	PB92 serine protea
764	6	1.4	269	15	R46306	Subtilisin 309 Ser
765	6	1.4	269	15	R46307	PB92 serine protea
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767	6	1.4	269	15	R46309	PB92 serine protea
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771	6	1.4	269	15	R46313	PB92 serine protea
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930	6	1.4	269	15	R46472	Subtilisin 309 Ser
931	6	1.4	269	15	R74621	Subtilisin 309/Y16
932	6	1.4	269	15	R74622	Subtilisin 309/K23
933	6	1.4	269	15	R74623	Subtilisin 309/Y20
934	6	1.4	269	15	R74624	Subtilisin 309/Y16
935	6	1.4	269	16	R91695	Subtilisin 309 mul
936	6	1.4	269	16	R91696	Subtilisin 309 mul
937	6	1.4	269	16	R91697	Subtilisin 309 mul
938	6	1.4	269	16	R91698	Subtilisin 309 mul
939	6	1.4	269	16	R91684	Subtilisin 309 loo
940	6	1.4	269	16	R91685	Subtilisin 309 loo
941	6	1.4	269	16	R91686	Subtilisin 309 loo
942	6	1.4	269	16	R91687	Subtilisin 309 loo
943	6	1.4	269	16	R91688	Subtilisin 309 loo
944	6	1.4	269	16	R91689	Subtilisin 309 loo
945	6	1.4	269	16	R91690	Subtilisin 309 loo
946	6	1.4	269	16	R91691	Subtilisin 309 loo
947	6	1.4	269	16	R91692	Subtilisin 309 loo
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949	6	1.4	269	16	R91694	Subtilisin 309 mul
950	6	1.4	269	16	R87984	Subtilisin 309 loo
951	6	1.4	269	16	R87987	Subtilisin 309 loo
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955	6	1.4	269	16	R87991	Subtilisin 309 loo
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964	6	1.4	269	16	R91681	Subtilisin 309 loo
965	6	1.4	269	16	R91682	Subtilisin 309 loo
966	6	1.4	269	16	R91683	Subtilisin 309 loo
967	6	1.4	269	16	R87999	Subtilisin 309 var
968	6	1.4	269	16	R88000	Subtilisin 309 var
969	6	1.4	269	16	R88001	Subtilisin 309 var
970	6	1.4	269	16	R87983	Subtilisin 309 loo
971	6	1.4	269	16	R87985	Subtilisin 309 loo
972	6	1.4	269	16	R87986	Subtilisin 309 loo
973	6	1.4	269	16	R80434	BLAP clone F11 (BL
974	6	1.4	269	16	R80435	BLAP clone F43 (BL
975	6	1.4	269	16	R80436	BLAP clone F44 (BL
976	6	1.4	269	16	R80437	BLAP clone F45 (BL
977	6	1.4	269	16	R80438	BLAP clone F46 (BL
978	6	1.4	269	16	R80439	BLAP clone F47 (BL
979	6	1.4	269	16	R80440	BLAP clone F49 (BL
980	6	1.4	269	16	R80441	BLAP clone F54 (BL
981	6	1.4	269	16	R80442	BLAP clone F55 (BL
982	6	1.4	269	16	R80415	BLAP (R99X, S154X,
983	6	1.4	269	16	R80416	BLAP M131 (S154X,
984	6	1.4	269	16	R80417	BLAP (R99X). Baci
985	6	1.4	269	16	R80418	BLAP M131 (R99X).
986	6	1.4	269	16	R80419	BLAP M130 (R99X).
987	6	1.4	269	16	R80420	BLAP M131 (S154X).
988	6	1.4	269	16	R80421	BLAP M131 (L211X).
989	6	1.4	269	16	R80422	BLAP M131 (R99X, L
990	6	1.4	269	16	R87486	Subtilisin N76D/I1
991	6	1.4	269	16	R87485	Subtilisin N76D/V1
992	6	1.4	269	16	R87484	Subtilisin N76D/V1
993	6	1.4	269	16	R87483	Subtilisin N76D/V1
994	6	1.4	269	16	R87482	Subtilisin N76D/S1
995	6	1.4	269	16	R87481	Subtilisin N76D/S1
996	6	1.4	269	16	R87480	Subtilisin N76D/S1
997	6	1.4	269	16	R87479	Subtilisin N76D/S9
998	6	1.4	269	16	R87478	Subtilisin N76D/S9
999	6	1.4	269	16	R87477	Subtilisin N76D/S9
1000	6	1.4	269	16	R87476	Subtilisin N76D/N1

ALIGNMENTS

```
RESULT   1
W79260
ID   W79260 standard; Protein; 440 AA.
XX
AC   W79260;
XX
DT   15-FEB-1999  (first entry)
XX
DE   Tumour necrosis factor receptor related protein Tango-63d.
XX
KW   Tango-63d; tumour necrosis factor receptor related protein; human;
KW   apoptosis; cancer; autoimmune disease; neurodegenerative disease.
XX
OS   Homo sapiens.
XX
PN   WO9846643-A1.
XX
PD   22-OCT-1998.
XX
PF   16-APR-1998;   98WO-US07694.
XX
PR   16-APR-1997;   97US-0843652.
XX
PA   (MILL-) MILLENNIUM BIOTHERAPEUTICS INC.
XX
PI   Holtzman D;
XX
DR   WPI; 1998-594562/50.
DR   N-PSDB; V62672.
XX
PT   Isolated tumour necrosis factor related proteins - used to develop
PT   products for the diagnosis and treatment of apoptosis-related
PT   disorders, e.g. cancers, autoimmune disorders or neurodegenerative
PT   disorders
XX
PS   Claim 4; Fig 1; 88pp; English.
XX
CC   This is the amino acid sequence of Tango-63d, a new member of the
CC   human tumour necrosis factor receptor superfamily.  It was deduced
CC   from a human prostate cDNA clone sequence (see V62672).  2
CC   Different forms of Tango-63, i.e. Tango-63d and Tango-63e (see
CC   W79261), have been identified.  These are identical with the
CC   exception of the deletion of amino acids 183-211 of Tango-63d in
CC   Tango-63e.  The invention also encompasses nucleic acid molecules
CC   encoding Tango-63d and -63e, vectors containing these nucleic acid
CC   molecules, cells harboring recombined DNA encoding Tango-63d and/or
CC   -63e, fusion proteins that include Tando-63d and/or -63e, transgenic
CC   animals that express Tango-63d and/or -63e, and recombinant knockout
CC   animals that fail to express Tango-63d and/or -63e.  Methods are
CC   provided for the diagnosis and treatment of disorders associated
CC   with either an abnormally high or an abnormally low rate of
CC   apoptotic cell death.  Inhibitors can be used for treating e.g.
CC   cancers, autoimmune disorders (e.g. systemic lupus erythematosus
CC   and immune-mediated glomerulonephritis), and viral infections (e.g.
CC   herpesviruses, poxviruses, and adenoviruses).  Agonists can be used
CC   for treating e.g. neurodegenerative diseases, e.g. Alzheimer's
CC   disease, Parkinson's disease, amyotrophic lateral sclerosis (ALS),
CC   Huntington's disease, retinitis pigmentosa, spinal muscular atrophy,
CC   various forms of cerebellar degeneration, anaemia, myelodysplastic
CC   syndrome, ischemic injury, myocardial infarction, cerebral ischemia
CC   or toxin-induced injury.  In addition, T cell mediated diseases,
CC   including AIDS, autoimmune diseases such as rheumatoid arthritis,
CC   and type I diabetes, septic shock, cerebral malaria, graft
CC   rejection, cytotoxicity, cachexia, and inflammation can be treated
CC   by altering the expression or activity of the polypeptides.  The
CC   products can also be used for detection, diagnosis and screening
CC   assays.
XX
SQ   Sequence  440 AA;

  Query Match             92.7%;  Score 408;  DB 19;  Length 440;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches  408;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      33 RVPKTLVLVVAAVLLLVSAESALITQQDLAPQQRAAPQQKRSSPSEGLCPPGHHISEDGR 92
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      33 rvpktlvlvvaavlllvsaesalitqqdlapqqraapqqkrsspseglcppghhisedgr 92

Qy      93 DCISCKYGQDYSTHWNDLLFCLRCTRCDSGEVELSPCTTTRNTVCQCEEGTFREEDSPEM 152
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      93 dciskygqdysthwndllfclrctrcdsgevelspctttrntvcqceegtfreedspem 152

Qy     153 CRKCRTGCPRGMVKVGDCTPWSDIECVHKESGTKHSGEAPAVEETVTSSPGTPASPCSLS 212
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     153 crkcrtgcprgmvkvgdctpwsdiecvhkesgtkhsgeapaveetvtsspgtpaspcsls 212

Qy     213 GIIIGVTVAAVVLIVAVFVCKSLLWKKVLPYLKGICSGGGGDPERVDRSSQRPGAEDNVL 272
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     213 giiigvtvaavvlivavfvcksllwkkvlpylkgicsggggdpervdrssqrpgaednvl 272

Qy     273 NEIVSILQPTQVPEQEMEVQEPAEPTGVNMLSPGESEHLLEPAEAERSQRRRLLVPANEG 332
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     273 neivsilqptqvpeqemevqepaeptgvnmlspgesehllepaeaersqrrrllvpaneg 332

Qy     333 DPTETLRQCFDDFADLVPFDSWEPLMRKLGLMDNEIKVAKAEAAGHRDTLYTMLIKWVNK 392
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     333 dptetlrqcfddfadlvpfdsweplmrklglmdneikvakaeaaghrdtlytmlikwvnk 392

Qy     393 TGRDASVHTLLDALETLGERLAKQKIEDHLLSSGKFMYLEGNADSAMS 440
           ||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db    393 tgrdasvhtlldaletlgerlakqkiedhllssgkfmylegnadsams 440


RESULT   2
Y05725
ID   Y05725 standard; Protein; 440 AA.
XX
AC   Y05725;
XX
DT   19-JUL-1999  (first entry)
XX
DE   Tumour necrosis factor receptor TRAIL-R2.
XX
KW   TRAIL-2; tumour necrosis factor receptor; apoptosis; cancer;
KW   therapy.
XX
OS   Mammalia.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..51
FT                   /note= "signal peptide"
FT   Protein         52..440
FT                   /note= "mature protein"
FT   Region          81..137
FT                   /note= "cysteine-rich repeat unit I"
FT   Region          139..178
FT                   /note= "cysteine-rich repeat unit II"
FT   Domain          211..231
FT                   /note= "transmembrane domain"
FT   Domain          353..422
FT                   /note= "death domain"
XX
PN   WO9912963-A2.
XX
PD   18-MAR-1999.
XX
PF   11-SEP-1998;   98WO-US19029.
XX
PR   06-MAY-1998;   98US-0084422.
PR   12-SEP-1997;   97US-0058631.
XX
PA   (BIOJ ) BIOGEN INC.
XX
PI   Tschopp J;
XX
DR   WPI; 1999-276942/23.
DR   N-PSDB; X25348.
XX
PT   Novel tumor necrosis factor receptor proteins TRAIL-R2 and TRAIL-R3
XX
PS   Disclosure; Page 27; 28pp; English.
XX
CC   The present sequence represents TRAIL-R2, a novel mammalian
CC   cysteine-rich receptor of the tumour necrosis factor receptor family.
CC   The invention is related to novel receptors for TRAIL, i.e. TRAIL-2
CC   and TRAIL-3 (see Y05726).  TRAIL-2 is structurally similar to the
CC   death domain-containing receptor TRAIL-R1.  Its cytoplasmic domain
CC   binds to the adaptor molecules FADD and TRADD, and can also
CC   associate with TRAIL-R1, suggesting that TRAIL may signal through a
CC   TRAIL-R1/TRAIL-R2 heteroreceptor signalling complex.  TRAIL-R2
CC   shows a broad tissue distribution.  A method for preventing or
CC   reducing the advancement, severity or effects of an immunological
CC   disease involves administering a TRAIL-R2 or TRAIL-R3 blocking
CC   agent such as a soluble TRAIL-R (preferably comprising a human
CC   immunoglobulin Fc domain) and an antibody.  A method of treating
CC   cancer involves administration of antibodies against TRAIL-R3 or
CC   TRAIL-R2.  A method of inducing cell death involves administration
CC   of an agent capable of inhibiting the binding of TRAIL-R2 or -R3 to
CC   its ligand.
XX
SQ   Sequence   440 AA;
```

```
  Query Match           84.8%;  Score 373;  DB 20;  Length 440;
  Best Local Similarity  100.0%;  Pred. No. 0;
  Matches  373;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      68 APQQKRSSPSEGLCPPGHHISEDGRDCISCKYGQDYSTHWNDLLFCLRCTRCDSGEVELS 127
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      68 apqqkrsspseglcppghhisedgrdcisckygqdysthwndllfclrctrcdsgevels 127

Qy     128 PCTTTRNTVCQCEEGTFREEDSPEMCRKCRTGCPRGMVKVGDCTPWSDIECVHKESGTKH 187
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     128 pctttrntvcqceegtfreedspemcrkcrtgcprgmvkvgdctpwsdiecvhkesgtkh 187

Qy     188 SGEAPAVEETVTSSPGTPASPCSLSGIIIGVTVAAVVLIVAVFVCKSLLWKKVLPYLKGI 247
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     188 sgeapaveetvtsspgtpaspcslsgiiigvtvaavvlivavfvcksllwkkvlpylkgi 247

Qy     248 CSGGGGDPERVDRSSQRPGAEDNVLNEIVSILQPTQVPEQEMEVQEPAEPTGVNMLSPGE 307
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     248 csggggdpervdrssqrpgaednvlneivsilqptqvpeqemevqepaeptgvnmlspge 307

Qy     308 SEHLLEPAEAERSQRRRLLVPANEGDPTETLRQCFDDFADLVPFDSWEPLMRKLGLMDNE 367
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     308 sehllepaeaersqrrrllvpanegdptetlrqcfddfadlvpfdsweplmrklglmdne 367

Qy     368 IKVAKAEAAGHRDTLYTMLIKWVNKTGRDASVHTLLDALETLGERLAKQKIEDHLLSSGK 427
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     368 ikvakaeaaghrdtlytmlikwvnktgrdasvhtlldaletlgerlakqkiedhllssgk 427

Qy     428 FMYLEGNADSAMS 440
           |||||||||||||
Db     428 fmylegnadsams 440


RESULT   3
B01340
ID   B01340 standard; Protein; 440 AA.
XX
AC   B01340;
XX
DT   25-SEP-2000  (first entry)
XX
DE   TNF-related apopotosis inducing ligand (TRAIL) receptor-2.
XX
KW   UL144; death receptor; apoptosis; programmed cell death; FAS;
KW   TNF-R1; TRAMP; DR-6; TRAIL; modulation; treatment; cancer; virus;
KW   human.
XX
OS   Homo sapiens.
XX
PN   WO200034335-A2.
XX
PD   15-JUN-2000.
XX
PF   03-DEC-1999;   99WO-US26035.
XX
PR   04-DEC-1998;   98US-0205018.
XX
PA   (SCHE ) SCHERING CORP.
XX
PI   Leong C,  Phillips JH;
XX
DR   WPI; 2000-423383/36.
XX
PT   Purified or recombinant polypeptide for modulating apoptosis comprises
PT   a sequence which binds to an antibody specific for UL144 or its
PT   fragments
XX
PS   Disclosure; Page 71-73; 76pp; English.
XX
CC   A pure or recombinant polypeptide which binds to a polyclonal antibody
CC   specific for the mature UL144 is useful for screening molecules which
CC   block induction of apoptosis or interfere with antiapoptotic activity.
CC   The polypeptide is also useful for modulating apoptosis and useful in
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CC   treatment of conditions associated with abnormal physiology or
CC   development, such as cancer or degenerative conditions and for
CC   regulation of viral infection and replication. At least five
CC   different death receptors are known, which include the CD95
CC   (Fas/APO-1), the TNF receptor-1, TNF receptor apoptosis-mediated
CC   protein (TRAMP), death receptor-6 (DR-6), and TNF-related
CC   apoptosis-inducing ligand (TRAIL) receptors 1, 2 and 4.
XX
SQ   Sequence   440 AA;


  Query Match             84.8%;  Score 373;  DB 21;  Length 440;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches  373;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      68 APQQKRSSPSEGLCPPGHHISEDGRDCISCKYGQDYSTHWNDLLFCLRCTRCDSGEVELS 127
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      68 apqqkrsspseglcppghhisedgrdcisckygqdysthwndllfclrctrcdsgevels 127

Qy     128 PCTTTRNTVCQCEEGTFREEDSPEMCRKCRTGCPRGMVKVGDCTPWSDIECVHKESGTKH 187
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     128 pctttrntvcqceegtfreedspemcrkcrtgcprgmvkvgdctpwsdiecvhkesgtkh 187

Qy     188 SGEAPAVEETVTSSPGTPASPCSLSGIIIGVTVAAVVLIVAVFVCKSLLWKKVLPYLKGI 247
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     188 sgeapaveetvtsspgtpaspcslsgiiigvtvaavvlivavfvcksllwkkvlpylkgi 247

Qy     248 CSGGGGDPERVDRSSQRPGAEDNVLNEIVSILQPTQVPEQEMEVQEPAEPTGVNMLSPGE 307
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     248 csggggdpervdrssqrpgaednvlneivsilqptqvpeqemevqepaeptgvnmlspge 307

Qy     308 SEHLLEPAEAERSQRRRLLVPANEGDPTETLRQCFDDFADLVPFDSWEPLMRKLGLMDNE 367
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     308 sehllepaeaersqrrrllvpanegdptetlrqcfddfadlvpfdsweplmrklglmdne 367

Qy     368 IKVAKAEAAGHRDTLYTMLIKWVNKTGRDASVHTLLDALETLGERLAKQKIEDHLLSSGK 427
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     368 ikvakaeaaghrdtlytmlikwvnktgrdasvhtlldaletlgerlakqkiedhllssgk 427

Qy     428 FMYLEGNADSAMS 440
           |||||||||||||
Db     428 fmylegnadsams 440


RESULT   4
Y00934
ID   Y00934 standard; Protein; 350 AA.
XX
AC   Y00934;
XX
DT   02-JUN-1999  (first entry)
XX
DE   Human DR5s protein sequence.
XX
KW   Human; DR5; DR5s; TRAIL-R3; apoptosis related condition; cancer; therapy;
KW   autoimmune disease; viral infection; degenerative disorder;
KW   amyotrophic lateral sclerosis; retinitis pigmentosa; ischaemic injury;
KW   cerebellar degeneration; myelodysplastic syndrome; splice variant.
XX
OS   Homo sapiens.
XX
PN   WO9909165-A1.
XX
PD   25-FEB-1999.
XX
PF   14-AUG-1998;   98WO-US16945.
XX
PR   15-AUG-1997;   97US-0055906.
XX
PA   (IDUN-) IDUN PHARM INC.
XX
PI   Alnemri ES;
XX
DR   WPI; 1999-181035/15.
DR   N-PSDB; X27281.
XX
PT   Newly isolated polynucleotide encoding a mammalian TRAIL receptor
PT   protein - useful in for screening for (ant)agonists that modulate
PT   the apoptotic activity mediated by DR5 or TRAIL-R3 proteins
XX
PS   Claim 16; Fig 5; 71pp; English.
XX
CC   This sequence is the human TRAIL receptor DR5s of the invention. An
CC   antibody against the TRAIL receptors is useful for detecting mammalian
CC   DR5 or TRAIL-R3 proteins in a sample. Recombinant cells are useful in
CC   bioassays for screening for (ant)agonists of DR5 or TRAIL-R3 proteins.
CC   (Ant)agonists identified by the assay are useful for modulating the
CC   apoptotic activity mediated by DR5 or TRAIL-R3 proteins. Apoptosis
CC   related conditions which are treated in this way, include cancer
CC   (e.g. lymphomas and carcinomas), autoimmune diseases (e.g. systemic lupus
CC   erythematosus and immune-mediated glomerulonephritis), viral infections
CC   (e.g. herpes virus, poxvirus and adenovirus), degenerative disorders
CC   (e.g. Alzheimer's disease and Parkinson's disease), amyotrophic lateral
CC   sclerosis, retinitis pigmentosa, cerebellar degeneration, myelodysplastic
CC   syndromes (e.g. aplastic anaemia) and ischaemic injury (e.g. myocardial
CC   infarction and stroke). The polynucleotides can also be used to treat
CC   these diseases. Antisense oligonucleotides to the DNA sequences can be
CC   used to form a composition that is useful for inhibiting expression of a
CC   human DR5 or TRAIL-R3 protein.
XX
SQ   Sequence   350 AA;


  Query Match             53.2%;  Score 234;  DB 20;  Length 350;
  Best Local Similarity   100.0%;  Pred. No. 8.9e-215;
  Matches  234;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      68 APQQKRSSPSEGLCPPGHHISEDGRDCISCKYGQDYSTHWNDLLFCLRCTRCDSGEVELS 127
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      68 apqqkrsspseglcppghhisedgrdcisckygqdysthwndllfclrctrcdsgevels 127

Qy     128 PCTTTRNTVCQCEEGTFREEDSPEMCRKCRTGCPRGMVKVGDCTPWSDIECVHKESGTKH 187
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     128 pctttrntvcqceegtfreedspemcrkcrtgcprgmvkvgdctpwsdiecvhkesgtkh 187

Qy     188 SGEAPAVEETVTSSPGTPASPCSLSGIIIGVTVAAVVLIVAVFVCKSLLWKKVLPYLKGI 247
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     188 sgeapaveetvtsspgtpaspcslsgiiigvtvaavvlivavfvcksllwkkvlpylkgi 247

Qy     248 CSGGGGDPERVDRSSQRPGAEDNVLNEIVSILQPTQVPEQEMEVQEPAEPTGVN 301
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     248 csggggdpervdrssqrpgaednvlneivsilqptqvpeqemevqepaeptgvn 301


RESULT   5
W76828
ID   W76828 standard; Protein; 303 AA.
XX
AC   W76828;
XX
DT   25-JAN-1999  (first entry)
XX
DE   Human TR6 partial protein.
XX
KW   TR6; tumour necrosis factor related receptor; human; treatment; stroke;
KW   inflammation; arthritis; septicaemia; autoimmune disease; restenosis;
KW   transplant rejection; infection; ischaemia; brain injury; bone disease;
KW   acute respiratory disease syndrome; acquired autoimmune disease syndrome;
KW   AIDS; cancer; atherosclerosis; Alzheimers disease.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Protein         1..303
FT                   /note= "Partial sequence. Start codon missing"
XX
```

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PN   EP870827-A2.
XX
PD   14-OCT-1998.
XX
PF   23-DEC-1997;   97EP-0310562.
XX
PR   22-AUG-1997;   97US-0916625.
PR   14-MAR-1997;   97US-0041230.
PR   09-MAY-1997;   97US-0853684.
XX
PA   (SMIK ) SMITHKLINE BEECHAM CORP.
XX
PI   Deen KC,  Young PR;
XX
DR   WPI; 1998-523156/45.
DR   N-PSDB; V63095.
XX
PT   DNA encoding tumour necrosis factor receptor TR6 - and corresponding
PT   polypeptide, antibody, agonist, antagonist, etc
XX
PS   Disclosure; Page 30-31; 34pp; English.
XX
CC   This sequence represents a novel human tumour necrosis factor related
CC   receptor, TR6. TR6 polypeptides and polynucleotides can be used in the
CC   treatment of chronic and acute inflammation, arthritis, septicaemia,
CC   autoimmune diseases (e.g. inflammatory bowel disease, psoriasis),
CC   transplant rejection, graft vs. host disease, infection, stroke,
CC   ischaemia, acute respiratory disease syndrome, restenosis, brain injury,
CC   (acquired autoimmune disease syndrome) AIDS, bone diseases, cancer (e.g.
CC   lympho-proliferative disorders), atherosclerosis and Alzheimers disease.
XX
SQ   Sequence   303 AA;


  Query Match             52.0%;  Score 229;  DB 19;  Length 303;
  Best Local Similarity   100.0%;  Pred. No. 4.6e-210;
  Matches  229;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     212 SGIIIGVTVAAVVLIVAVFVCKSLLWKKVLPYLKGICSGGGGDPERVDRSSQRPGAEDNV 271
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      75 sgiiigvtvaavvlivavfvcksllwkkvlpylkgicsggggdpervdrssqrpgaednv 134

Qy     272 LNEIVSILQPTQVPEQEMEVQEPAEPTGVNMLSPGESEHLLEPAEAERSQRRRLLVPANE 331
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     135 lneivsilqptqvpeqemevqepaeptgvnmlspgesehllepaeaersqrrrllvpane 194

Qy     332 GDPTETLRQCFDDFADLVPFDSWEPLMRKLGLMDNEIKVAKAEAAGHRDTLYTMLIKWVN 391
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     195 gdptetlrqcfddfadlvpfdsweplmrklglmdneikvakaeaaghrdtlytmlikwvn 254

Qy     392 KTGRDASVHTLLDALETLGERLAKQKIEDHLLSSGKFMYLEGNADSAMS 440
           ||||||||||||||||||||||||||||||||||||||||||||||||||
Db     255 ktgrdasvhtlldaletlgerlakqkiedhllssgkfmylegnadsams 303


RESULT   6
W79261
ID   W79261 standard; Protein; 411 AA.
XX
AC   W79261;
XX
DT   15-FEB-1999  (first entry)
XX
DE   Tumour necrosis factor receptor related protein Tango-63e.
XX
KW   Tango-63e; tumour necrosis factor receptor related protein; human;
KW   apoptosis; cancer; autoimmune disease; neurodegenerative disease.
XX
OS   Homo sapiens.
XX
PN   WO9846643-A1.
XX
PD   22-OCT-1998.
XX
PF   16-APR-1998;   98WO-US07694.
XX
PR   16-APR-1997;   97US-0843652.
XX
PA   (MILL-) MILLENNIUM BIOTHERAPEUTICS INC.
XX
PI   Holtzman D;
XX
DR   WPI; 1998-594562/50.
DR   N-PSDB; V62673.
XX
PT   Isolated tumour necrosis factor related proteins - used to develop
PT   products for the diagnosis and treatment of apoptosis-related
PT   disorders, e.g. cancers, autoimmune disorders or neurodegenerative
PT   disorders
XX
PS   Claim 6; Fig 2; 88pp; English.
XX
CC   This is the amino acid sequence of Tango-63e, a new member of the
CC   human tumour necrosis factor receptor superfamily. It was deduced
CC   from a human prostate cDNA clone sequence (see V62673). Two
CC   different forms of Tango-63, i.e. Tango-63e and Tango-63d (see
CC   W79260), have been identified. These are identical with the
CC   exception of the deletion of amino acids 183-211 of Tango-63d in
CC   Tango-63e. The invention also encompasses nucleic acid molecules
CC   encoding Tango-63d and -63e, vectors containing these nucleic acid
CC   molecules, cells harboring recombined DNA encoding Tango-63d and/or
CC   -63e, fusion proteins that include Tando-63d and/or -63e, transgenic
CC   animals that express Tango-63d and/or -63e, and recombinant knockout
CC   animals that fail to express Tango-63d and/or -63e. Methods are
CC   provided for the diagnosis and treatment of disorders associated
CC   with either an abnormally high or an abnormally low rate of
CC   apoptotic cell death. Inhibitors can be used for treating e.g.
CC   cancers, autoimmune disorders (e.g. systemic lupus erythematosus
CC   and immune-mediated glomerulonephritis), and viral infections (e.g.
CC   herpesviruses, poxviruses, and adenoviruses). Agonists can be used
CC   for treating e.g. neurodegenerative diseases, e.g. Alzheimer's
CC   disease, Parkinson's disease, amyotrophic lateral sclerosis (ALS),
CC   Huntington's disease, retinitis pigmentosa, spinal muscular atrophy,
CC   various forms of cerebellar degeneration, anaemia, myelodysplastic
CC   syndrome, ischemic injury, myocardial infarction, cerebral ischemia
CC   or toxin-induced injury. In addition, T cell mediated diseases,
CC   including AIDS, autoimmune diseases such as rheumatoid arthritis,
CC   and type I diabetes, septic shock, cerebral malaria, graft
CC   rejection, cytotoxicity, cachexia, and inflammation can be treated
CC   by altering the expression or activity of the polypeptides. The
CC   products can also be used for detection, diagnosis and screening
CC   assays.
XX
SQ   Sequence   411 AA;


  Query Match             52.0%;  Score 229;  DB 19;  Length 411;
  Best Local Similarity   100.0%;  Pred. No. 6e-210;
  Matches  229;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     212 SGIIIGVTVAAVVLIVAVFVCKSLLWKKVLPYLKGICSGGGGDPERVDRSSQRPGAEDNV 271
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     183 sgiiigvtvaavvlivavfvcksllwkkvlpylkgicsggggdpervdrssqrpgaednv 242

Qy     272 LNEIVSILQPTQVPEQEMEVQEPAEPTGVNMLSPGESEHLLEPAEAERSQRRRLLVPANE 331
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     243 lneivsilqptqvpeqemevqepaeptgvnmlspgesehllepaeaersqrrrllvpane 302

Qy     332 GDPTETLRQCFDDFADLVPFDSWEPLMRKLGLMDNEIKVAKAEAAGHRDTLYTMLIKWVN 391
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     303 gdptetlrqcfddfadlvpfdsweplmrklglmdneikvakaeaaghrdtlytmlikwvn 362

Qy     392 KTGRDASVHTLLDALETLGERLAKQKIEDHLLSSGKFMYLEGNADSAMS 440
           ||||||||||||||||||||||||||||||||||||||||||||||||||
Db     363 ktgrdasvhtlldaletlgerlakqkiedhllssgkfmylegnadsams 411
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RESULT   7
W76827
ID   W76827 standard; Protein; 411 AA.
XX
AC   W76827;
XX
DT   25-JAN-1999  (first entry)
XX
DE   Human TR6 protein.
XX
KW   TR6; tumour necrosis factor related receptor; human; treatment; stroke;
KW   inflammation; arthritis; septicaemia; autoimmune disease; restenosis;
KW   transplant rejection; infection; ischaemia; brain injury; bone disease;
KW   acute respiratory disease syndrome; acquired autoimmune disease syndrome;
KW   AIDS; cancer; atherosclerosis; Alzheimers disease.
XX
OS   Homo sapiens.
XX
PN   EP870827-A2.
XX
PD   14-OCT-1998.
XX
PF   23-DEC-1997;   97EP-0310562.
XX
PR   22-AUG-1997;   97US-0916625.
PR   14-MAR-1997;   97US-0041230.
PR   09-MAY-1997;   97US-0853684.
XX
PA   (SMIK ) SMITHKLINE BEECHAM CORP.
XX
PI   Deen KC,  Young PR;
XX
DR   WPI; 1998-523156/45.
DR   N-PSDB; V63094.
XX
PT   DNA encoding tumour necrosis factor receptor TR6 - and corresponding
PT   polypeptide, antibody, agonist, antagonist, etc
XX
PS   Claim 1; Page 27-29; 34pp; English.
XX
CC   This sequence represents a novel human tumour necrosis factor related
CC   receptor, TR6. TR6 polypeptides and polynucleotides can be used in the
CC   treatment of chronic and acute inflammation, arthritis, septicaemia,
CC   autoimmune diseases (e.g. inflammatory bowel disease, psoriasis),
CC   transplant rejection, graft vs. host disease, infection, stroke,
CC   ischaemia, acute respiratory disease syndrome, restenosis, brain injury,
CC   (acquired autoimmune disease syndrome) AIDS, bone diseases, cancer (e.g.
CC   lympho-proliferative disorders), atherosclerosis and Alzheimers disease.
XX
SQ   Sequence   411 AA;

  Query Match             52.0%;  Score 229;  DB 19;  Length 411;
  Best Local Similarity   100.0%;  Pred. No. 6e-210;
  Matches  229;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     212 SGIIIGVTVAAVVLIVAVFVCKSLLWKKVLPYLKGICSGGGGDPERVDRSSQRPGAEDNV 271
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     183 sgiiigvtvaavvlivavfvcksllwkkvlpylkgicsggggdpervdrssqrpgaednv 242

Qy     272 LNEIVSILQPTQVPEQEMEVQEPAEPTGVNMLSPGESEHLLEPAEAERSQRRRLLVPANE 331
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     243 lneivsilqptqvpeqemevqepaeptgvnmlspgesehllepaeaersqrrrllvpane 302

Qy     332 GDPTETLRQCFDDFADLVPFDSWEPLMRKLGLMDNEIKVAKAEAAGHRDTLYTMLIKWVN 391
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     303 gdptetlrqcfddfadlvpfdsweplmrklglmdneikvakaeaaghrdtlytmlikwvn 362

Qy     392 KTGRDASVHTLLDALETLGERLAKQKIEDHLLSSGKFMYLEGNADSAMS 440
           ||||||||||||||||||||||||||||||||||||||||||||||||||
Db     363 ktgrdasvhtlldaletlgerlakqkiedhllssgkfmylegnadsams 411
```

```
RESULT   8
W79083
ID   W79083 standard; Protein; 411 AA.
XX
AC   W79083;
XX
DT   11-JAN-1999  (first entry)
XX
DE   Human death domain containing receptor 5 (DR5).
XX
KW   Death domain containing receptor 5; DR5; human; apoptosis;
KW   tumour necrosis factor receptor; cancer; autoimmune disease;
KW   inflammation; infection; AIDS; graft versus host disease;
KW   neurodegeneration; systemic lupus erythematosus;
KW   glomerulonephritis; rheumatoid arthritis; graft rejection;
KW   osteoarthritis; psoriasis; septicaemia; inflammatory bowel disease;
KW   Alzheimer's disease; Parkinson's disease; retinitis pigmentosa;
KW   amyotrophic lateral sclerosis; aplastic anaemia; ischaemia;
KW   septic shock; cachexia; anorexia; agonist; antagonist; therapy;
KW   diagnosis.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..51
FT                   /label= Sig_peptide
FT   Protein         52..411
FT                   /label= Mat_protein
FT   Domain          52..184
FT                   /label= Extracellular
FT   Domain          185..208
FT                   /label= Transmembrane
FT   Domain          209..411
FT                   /label= Intracellular
FT   Domain          324..391
FT                   /label= Death
XX
PN   WO9841629-A2.
XX
PD   24-SEP-1998.
XX
PF   17-MAR-1998;   98WO-US05377.
XX
PR   29-JUL-1997;   97US-0054021.
PR   17-MAR-1997;   97US-0040846.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Gentz RL,  Ni J,  Rosen CA,  Su JY,  Yu G;
XX
DR   WPI; 1998-531568/45.
DR   N-PSDB; V61469.
XX
PT   New isolated death domain containing receptor 5 - used to develop
PT   products for treating e.g. cancers, autoimmune disorders, viral
PT   infections, inflammation, graft-versus-host disease or
PT   neurodegenerative disorders
XX
PS   Claim 4; Fig 1A-B; 89pp; English.
XX
CC   This is the amino acid sequence of human death domain containing
CC   receptor 5 (DR5), deduced from an isolated DR5 nucleic acid (see
CC   V61469).  DR5 is a novel member of the tumour necrosis factor
CC   receptor (TNFR) family that has been shown to bind TRAIL, and which
CC   has the ability to induce apoptosis.  It shows homology to human
CC   TNFR1, FAS and DR3.  DR5 cDNA has been identified in primary
CC   dendritic cells, endothelial tissue, spleen, chronic lymphocytic
CC   leukaemia, and human thymus stromal cells.  The isolated nucleic
CC   acid can be used in the recombinant production of DR5 polypeptides,
CC   e.g. the extracellular, transmembrane, intracellular domains,
CC   mature protein or soluble polypeptides lacking the transmembrane
CC   domain; vectors, host cells and recombinant methods of producing
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CC   the polypeptides are claimed.  DR5 polypeptides can be used to
CC   identify agonists and antagonists, and to raise antibodies.
CC   Agonists, which increase DR5 mediated signalling, can be used to
CC   treat diseases in which decreased apoptosis is exhibited, e.g.
CC   cancers, autoimmune disorders (such as systemic lupus erythematosus
CC   and immune-related glomerulonephritis rheumatoid arthritis) and
CC   viral infections (such as herpes viruses, pox viruses and
CC   adenoviruses), inflammation, graft versus host disease, acute graft
CC   rejection, chronic graft rejection, rheumatoid arthritis,
CC   osteoarthritis, psoriasis, septicemia, and inflammatory bowel
CC   disease.  Antagonists, which decrease DR5 mediated signalling, can
CC   be used to treat diseases in which apoptosis is exhibited, e.g.
CC   AIDS, neurodegenerative disorders (such as Alzheimer's disease,
CC   Parkinson's disease, amyotrophic lateral sclerosis, retinitis
CC   pigmentosa, cerebellar degeneration), myelodysplastic syndromes
CC   (such as aplastic anaemia), ischemic injury (such as that caused by
CC   myocardial infarction, stroke and reperfusion injury), toxin-induced
CC   liver disease (such as that caused by alcohol), septic shock,
CC   cachexia and anorexia.  The products can also be used for detection,
CC   diagnosis and drug screening.
XX
SQ   Sequence   411 AA;


  Query Match             52.0%;  Score 229;  DB 19;  Length 411;
  Best Local Similarity   100.0%;  Pred. No. 6e-210;
  Matches  229;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     212 SGIIIGVTVAAVVLIVAVFVCKSLLWKKVLPYLKGICSGGGGDPERVDRSSQRPGAEDNV 271
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     183 sgiiigvtvaavvlivavfvcksllwkkvlpylkgicsggggdpervdrssqrpgaednv 242

Qy     272 LNEIVSILQPTQVPEQEMEVQEPAEPTGVNMLSPGESEHLLEPAEAERSQRRRLLVPANE 331
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     243 lneivsilqptqvpeqemevqepaeptgvnmlspgesehllepaeaersqrrrllvpane 302

Qy     332 GDPTETLRQCFDDFADLVPFDSWEPLMRKLGLMDNEIKVAKAEAAGHRDTLYTMLIKWVN 391
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     303 gdptetlrqcfddfadlvpfdsweplmrklglmdneikvakaeaaghrdtlytmlikwvn 362

Qy     392 KTGRDASVHTLLDALETLGERLAKQKIEDHLLSSGKFMYLEGNADSAMS 440
          ||||||||||||||||||||||||||||||||||||||||||||||||||
Db     363 ktgrdasvhtlldaletlgerlakqkiedhllssgkfmylegnadsams 411


RESULT   9
W93608
ID   W93608 standard; Protein; 411 AA.
XX
AC   W93608;
XX
DT   18-JUN-1999  (first entry)
XX
DE   Human killer adriamycin-inducible protein.
XX
KW   Killer protein; adriamycin inducible; human; chromosome 8p21; diagnosis;
KW   p53-inducible; apoptosis-mediating activity; treatment; animal model;
KW   neoplastic disease.
XX
OS   Homo sapiens.
XX
PN   WO9902653-A1.
XX
PD   21-JAN-1999.
XX
PF   10-JUL-1998;   98WO-US14495.
XX
PR   11-MAR-1998;   98US-0077661.
PR   11-JUL-1997;   97US-0052305.
PR   04-AUG-1997;   97US-0054710.
PR   30-SEP-1997;   97US-0060473.
PR   11-MAR-1998;   98US-0077526.
PR   11-MAR-1998;   98US-0077628.
XX
PA   (UYPE-) UNIV PENNSYLVANIA.
XX
PI   El-Deiry WS;
XX
DR   WPI; 1999-120857/10.
DR   N-PSDB; X23721.
XX
PT   A new nucleic acid encodes a p53-induced protein (Killer) - which
PT   induces apoptosis and is useful in the diagnosis and treatment of
PT   neoplastic diseases
XX
PS   Claim 8; Page 44; 65pp; English.
XX
CC   This invention describes a novel human adriamycin-inducible killer
CC   protein located on chromosome 8p21, which also has p53-inducible,
CC   apoptosis-mediating activity and comprises an amino-terminal
CC   extracellular receptor, transmembrane and death domains. The nucleic
CC   acid molecule which encodes the protein, it's encoded signal
CC   transduction protein and antibodies of the invention are useful in the
CC   diagnosis and treatment of neoplastic diseases. The invention is also
CC   useful for the production of animal model systems.
XX
SQ   Sequence   411 AA;


  Query Match             52.0%;  Score 229;  DB 20;  Length 411;
  Best Local Similarity   100.0%;  Pred. No. 6e-210;
  Matches  229;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     212 SGIIIGVTVAAVVLIVAVFVCKSLLWKKVLPYLKGICSGGGGDPERVDRSSQRPGAEDNV 271
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     183 sgiiigvtvaavvlivavfvcksllwkkvlpylkgicsggggdpervdrssqrpgaednv 242

Qy     272 LNEIVSILQPTQVPEQEMEVQEPAEPTGVNMLSPGESEHLLEPAEAERSQRRRLLVPANE 331
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     243 lneivsilqptqvpeqemevqepaeptgvnmlspgesehllepaeaersqrrrllvpane 302

Qy     332 GDPTETLRQCFDDFADLVPFDSWEPLMRKLGLMDNEIKVAKAEAAGHRDTLYTMLIKWVN 391
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     303 gdptetlrqcfddfadlvpfdsweplmrklglmdneikvakaeaaghrdtlytmlikwvn 362

Qy     392 KTGRDASVHTLLDALETLGERLAKQKIEDHLLSSGKFMYLEGNADSAMS 440
          ||||||||||||||||||||||||||||||||||||||||||||||||||
Db     363 ktgrdasvhtlldaletlgerlakqkiedhllssgkfmylegnadsams 411


RESULT   10
W93576
ID   W93576 standard; Protein; 411 AA.
XX
AC   W93576;
XX
DT   18-JUN-1999  (first entry)
XX
DE   Human hAPO8 protein.
XX
KW   Tumour necrosis factor receptor; signal transducer molecule; TNF; APO4;
KW   developmental abnormality; gestational abnormalitity; prostate cancer;
KW   APO6; APO8; APO9; TNRL-1; TNRL-3; diagnosis; treatment; therapy; disease;
KW   cytoplasmic domain; immunogen; antibody preparation; breast carcinoma;
KW   apoptosis; human.
XX
OS   Homo sapiens.
XX
PN   WO9911791-A2.
XX
PD   11-MAR-1999.
XX
PF   04-SEP-1998;   98WO-US18393.
XX
PR   05-SEP-1997;   97US-0924634.
XX
```

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PA   (UNIW ) UNIV WASHINGTON.
XX
PI   Chaudhary PM;
XX
DR   WPI; 1999-205191/17.
DR   N-PSDB; X23410.
XX
PT   New Tumor Necrosis Factor family receptor polypeptides and ligands -
PT   useful for diagnosis and treatment of prostate cancer and
PT   developmental or gestational abnormalities
XX
PS   Claim 19; Fig 2; 156pp; English.
XX
CC   This invention describes isolated Tumor Necrosis Factor (TNF) family
CC   receptor polypeptides: APO4, APO6, APO8 and APO9 or their active
CC   fragments, and isolated TNF related ligands 1 and 3 (TNRL1 and TNRL3) or
CC   their active fragments. APO4 is useful for diagnosing prostate cancer
CC   by determining levels of APO4 in an individual. Prostate cancer can also
CC   be treated using APO4 selective binding agents linked to a therapeutic
CC   moiety. APO4 polypeptides are also useful for identifying selective
CC   binding agents, useful in diagnosis/treatment of disease by binding of
CC   agents to the polypeptide/active fragment which is extracellular, or
CC   expressed on the cell surface. The binding is preferably performed in
CC   vivo. APO4 polypeptides/ active fragments are also useful for screening
CC   for agonists and antagonists by binding and observing the changer in APO4
CC   activity. Effective pharmacological agents useful in diagnosis or
CC   treatment of disease are also identified using APO4 polypeptides/active
CC   fragments and APO4 signal transducer molecules that specifically interact
CC   with a cytoplasmic domain of APO4 and detecting a change in level of APO4
CC   activity. The method is performed in vivo or in vitro. APO polypeptides
CC   are all useful as immunogens for preparing antibodies. APO4 is also
CC   useful for diagnosis/treatment of developmental or gestational
CC   abnormalities. APO8 was transfected to human breast carcinoma cell line
CC   MCF-7, and induced apoptosis.
XX
SQ   Sequence   411 AA;

  Query Match             52.0%;  Score 229;  DB 20;  Length 411;
  Best Local Similarity   100.0%;  Pred. No. 6e-210;
  Matches  229;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     212 SGIIIGVTVAAVVLIVAVFVCKSLLWKKVLPYLKGICSGGGGDPERVDRSSQRPGAEDNV 271
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     183 sgiiigvtvaavvlivavfvcksllwkkvlpylkgicsggggdpervdrssqrpgaednv 242

Qy     272 LNEIVSILQPTQVPEQEMEVQEPAEPTGVNMLSPGESEHLLEPAEAERSQRRRLLVPANE 331
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     243 lneivsilqptqvpeqemevqepaeptgvnmlspgesehllepaeaersqrrrllvpane 302

Qy     332 GDPTETLRQCFDDFADLVPFDSWEPLMRKLGLMDNEIKVAKAEAAGHRDTLYTMLIKWVN 391
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     303 gdptetlrqcfddfadlvpfdsweplmrklglmdneikvakaeaaghrdtlytmlikwvn 362

Qy     392 KTGRDASVHTLLDALETLGERLAKQKIEDHLLSSGKFMYLEGNADSAMS 440
           ||||||||||||||||||||||||||||||||||||||||||||||||||
Db     363 ktgrdasvhtlldaletlgerlakqkiedhllssgkfmylegnadsams 411


RESULT  11
Y00932
ID   Y00932 standard; Protein; 411 AA.
XX
AC   Y00932;
XX
DT   02-JUN-1999  (first entry)
XX
DE   Human DR5 protein sequence.
XX
KW   Human; DR5; DR5s; TRAIL-R3; apoptosis related condition; cancer; therapy;
KW   autoimmune disease; viral infection; degenerative disorder;
KW   amyotrophic lateral sclerosis; retinitis pigmentosa; ischaemic injury;
KW   cerebellar degeneration; myelodysplastic syndrome.
XX
OS   Homo sapiens.
XX
PN   WO9909165-A1.
XX
PD   25-FEB-1999.
XX
PF   14-AUG-1998;   98WO-US16945.
XX
PR   15-AUG-1997;   97US-0055906.
XX
PA   (IDUN-) IDUN PHARM INC.
XX
PI   Alnemri ES;
XX
DR   WPI; 1999-181035/15.
DR   N-PSDB; X27279.
XX
PT   Newly isolated polynucleotide encoding a mammalian TRAIL receptor
PT   protein - useful in for screening for (ant)agonists that modulate
PT   the apoptotic activity mediated by DR5 or TRAIL-R3 proteins
XX
PS   Claim 16; Page 58-60; 71pp; English.
XX
CC   This sequence is the human TRAIL receptor DR5 of the invention. An
CC   antibody against the TRAIL receptors is useful for detecting mammalian
CC   DR5 or TRAIL-R3 proteins in a sample. Recombinant cells are useful in
CC   bioassays for screening for (ant)agonists of DR5 or TRAIL-R3 proteins.
CC   (Ant)agonists identified by the assay are useful for modulating the
CC   apoptotic activity mediated by DR5 or TRAIL-R3 proteins. Apoptosis
CC   related conditions which are treated in this way, include cancer
CC   (e.g. lymphomas and carcinomas), autoimmune diseases (e.g. systemic lupus
CC   erythematosus and immune-mediated glomerulonephritis), viral infections
CC   (e.g. herpes virus, poxvirus and adenovirus), degenerative disorders
CC   (e.g. Alzheimer's disease and Parkinson's disease), amyotrophic lateral
CC   sclerosis, retinitis pigmentosa, cerebellar degeneration, myelodysplastic
CC   syndromes (e.g. aplastic anaemia) and ischaemic injury (e.g. myocardial
CC   infarction and stroke). The polynucleotides can also be used to treat
CC   these diseases. Antisense oligonucleotides to the DNA sequences can be
CC   used to form a composition that is useful for inhibiting expression of a
CC   human DR5 or TRAIL-R3 protein.
XX
SQ   Sequence   411 AA;

  Query Match             52.0%;  Score 229;  DB 20;  Length 411;
  Best Local Similarity   100.0%;  Pred. No. 6e-210;
  Matches  229;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     212 SGIIIGVTVAAVVLIVAVFVCKSLLWKKVLPYLKGICSGGGGDPERVDRSSQRPGAEDNV 271
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     183 sgiiigvtvaavvlivavfvcksllwkkvlpylkgicsggggdpervdrssqrpgaednv 242

Qy     272 LNEIVSILQPTQVPEQEMEVQEPAEPTGVNMLSPGESEHLLEPAEAERSQRRRLLVPANE 331
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     243 lneivsilqptqvpeqemevqepaeptgvnmlspgesehllepaeaersqrrrllvpane 302

Qy     332 GDPTETLRQCFDDFADLVPFDSWEPLMRKLGLMDNEIKVAKAEAAGHRDTLYTMLIKWVN 391
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     303 gdptetlrqcfddfadlvpfdsweplmrklglmdneikvakaeaaghrdtlytmlikwvn 362

Qy     392 KTGRDASVHTLLDALETLGERLAKQKIEDHLLSSGKFMYLEGNADSAMS 440
           ||||||||||||||||||||||||||||||||||||||||||||||||||
Db     363 ktgrdasvhtlldaletlgerlakqkiedhllssgkfmylegnadsams 411


RESULT  12
B29790
ID   B29790 standard; Protein; 411 AA.
XX
AC   B29790;
XX
DT   28-FEB-2001  (first entry)
```

```
XX
DE   Human death domain containing receptor-5 (DR5).
XX
KW   Human death domain containing receptor-5; DR5; anti-DR5 antibody;
KW   TRAIL binding; TNF-related apoptosis-inducing ligand; pro-apoptotic;
KW   tumour necrosis factor receptor family; TNFR; graft-versus-host disease;
KW   viral infection; cancer; leukaemia; immunodeficiency; autoimmune disease;
KW   T-cell mediated immune response; osteoarthritis; psoriasis; septicaemia;
KW   inflammatory bowel disease; parasitic infection; bacterial infection;
KW   restenosis.
XX
OS   Homo sapiens.
XX
PN   WO200066156-A1.
XX
PD   09-NOV-2000.
XX
PF   04-MAY-2000; 2000WO-US12041.
XX
PR   04-MAY-1999;   99US-0132498.
PR   07-MAY-1999;   99US-0133238.
PR   13-AUG-1999;   99US-0148939.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Ni J,  Gentz RL,  Yu G,  Rosen CA;
XX
DR   WPI; 2000-687447/67.
DR   N-PSDB; C81544.
XX
PT   Treating graft-versus-host disease, viral infection, cancer, leukemia,
PT   immunodeficiency, or an autoimmune disorder comprising administering an
PT   antibody to Death domain containing receptor (DR5) and a second agent -
XX
PS   Claim 1; Fig 1A-B; 266pp; English.
XX
CC   The invention relates to a novel method for treating graft-versus-host
CC   disease, viral infection, cancer, leukaemia, immunodeficiency, or an
CC   autoimmune disorder. The method comprises administering an antibody
CC   specific for human death domain containing receptor-5 (DR5); B29790) and
CC   a second agent selected from TRAIL (TNF-related apoptosis-inducing
CC   ligand), a tumour necrosis factor (TNF), a TNF blocking agent, an
CC   immunosuppressive agent, an antibiotic, an antiinflammatory agent, a
CC   chemotherapeutic agent, or a cytokine. DR5 is a member of the TNF
CC   receptor (TNFR) family, and is a mediator of apoptosis, being able to
CC   bind TRAIL. The method of the invention is useful for the treatment of
CC   graft-versus-host disease, viral infection, cancer, leukemia,
CC   immunodeficiency, or an autoimmune disorder. The DR-5 antibody is useful
CC   for treating or preventing diseases and conditions associated with
CC   increased cell survival and/or insensitivity to apoptosis-inducing
CC   agents. Examples of such diseases are solid tissue cancers and
CC   leukaemias. Antagonists of DR5 are useful for inhibiting T-cell mediated
CC   immune responses, and preventing and/or treating diseases and conditions
CC   associated with T-cell mediated immune responses such as graft-versus-
CC   host responses, osteoarthritis, psoriasis, septicaemia, inflammatory
CC   bowel disease, autoimmune diseases and leukaemia. DR5 nucleotides and
CC   proteins are useful for diagnosis, prevention and/or treatment of
CC   parasitic, bacterial, and viral infections, restenosis and autoimmune
CC   disorders. The present sequence represents human DR5.
XX
SQ   Sequence   411 AA;

  Query Match           52.0%;  Score 229;  DB 21;  Length 411;
  Best Local Similarity  100.0%;  Pred. No. 6e-210;
  Matches  229;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     212 SGIIIGVTVAAVVLIVAVFVCKSLLWKKVLPYLKGICSGGGGDPERVDRSSQRPGAEDNV 271
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     183 sgiiigvtvaavvlivavfvcksllwkkvlpylkgicsggggdpervdrssqrpgaednv 242

Qy     272 LNEIVSILQPTQVPEQEMEVQEPAEPTGVNMLSPGESEHLLEPAEAERSQRRRLLVPANE 331
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db     243 lneivsilqptqvpeqemevqepaeptgvnmlspgesehllepaeaersqrrrllvpane 302

Qy     332 GDPTETLRQCFDDFADLVPFDSWEPLMRKLGLMDNEIKVAKAEAAGHRDTLYTMLIKWVN 391
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     303 gdptetlrqcfddfadlvpfdsweplmrklglmdneikvakaeaaghrdtlytmlikwvn 362

Qy     392 KTGRDASVHTLLDALETLGERLAKQKIEDHLLSSGKFMYLEGNADSAMS 440
           ||||||||||||||||||||||||||||||||||||||||||||||||||
Db     363 ktgrdasvhtlldaletlgerlakqkiedhllssgkfmylegnadsams 411


RESULT  13
W88410
ID   W88410 standard; Protein; 411 AA.
XX
AC   W88410;
XX
DT   26-APR-1999  (first entry)
XX
DE   Human Apo-2 ligand.
XX
KW   Apo-2 ligand; Apo-2DcR; human; tumour necrosis factor receptor;
KW   neurodegeneration; autoimmune disease; inflammation; cancer;
KW   apoptosis; therapy.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..53
FT                   /note= "signal peptide"
FT   Protein         54..411
FT                   /note= "mature protein"
FT   Domain          54..182
FT                   /note= "extracellular domain"
FT   Domain          183..208
FT                   /note= "transmembrane domain"
FT   Domain          209..411
FT                   /note= "intracellular domain"
FT   Region          96..137
FT                   /note= "cysteine-rich region"
FT   Region          138..179
FT                   /note= "cysteine-rich region"
FT   Domain          324..391
FT                   /note= "death domain"
FT   Misc-difference 410
FT                   /label= Met, Leu
FT                   /note= "encoded by WTG"
XX
PN   WO9858062-A1.
XX
PD   23-DEC-1998.
XX
PF   12-JUN-1998;   98WO-US12456.
XX
PR   18-JUN-1997;   97US-0878168.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Baker KP,  Chuntharapai A,  Gurney A;
PI   Kim KJ,  Wood WI;
XX
DR   WPI; 1999-095340/08.
DR   N-PSDB; V84352.
XX
PT   New Apo-2DcR polypeptide - used for modulation and diagnosis of
PT   apoptosis, e.g. in neurodegeneration
XX
PS   Example 5; Page 61-62; 88pp; English.
XX
CC   This polypeptide comprises human Apo-2 ligand.  The amino acid
CC   sequence was deduced from a nucleotide sequence (see V84352)
CC   produced from overlapping cDNA clones obtained from human kidney
CC   and pancreatic cDNA libraries.  The invention relates to Apo-2DcR
```

```
CC   (see W88408), a novel member of the tumour necrosis factor receptor
CC   family that binds to Apo-2 ligand and is involved in apoptosis.
CC   Apo-2DcR polypeptides are used to modulate apoptosis of mammalian
CC   cells (claimed) e.g. in the treatment of neurodegeneration,
CC   autoimmune diseases and inflammation.  The Apo-2DcR polypeptides
CC   are optionally used in conjunction with Apo-2 ligand, the
CC   bioavailability of which is increased by antibody-mediated blockade
CC   of Apo-2DcR.
XX
SQ   Sequence   411 AA;


  Query Match             51.6%;  Score 227;  DB 20;  Length 411;
  Best Local Similarity   100.0%;  Pred. No. 4.9e-208;
  Matches  227;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     212 SGIIIGVTVAAVVLIVAVFVCKSLLWKKVLPYLKGICSGGGGDPERVDRSSQRPGAEDNV 271
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     183 sgiiigvtvaavvlivavfvcksllwkkvlpylkgicsggggdpervdrssqrpgaednv 242

Qy     272 LNEIVSILQPTQVPEQEMEVQEPAEPTGVNMLSPGESEHLLEPAEAERSQRRRLLVPANE 331
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     243 lneivsilqptqvpeqemevqepaeptgvnmlspgesehllepaeaersqrrrllvpane 302

Qy     332 GDPTETLRQCFDDFADLVPFDSWEPLMRKLGLMDNEIKVAKAEAAGHRDTLYTMLIKWVN 391
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     303 gdptetlrqcfddfadlvpfdsweplmrklglmdneikvakaeaaghrdtlytmlikwvn 362

Qy     392 KTGRDASVHTLLDALETLGERLAKQKIEDHLLSSGKFMYLEGNADSA 438
           |||||||||||||||||||||||||||||||||||||||||||||||
Db     363 ktgrdasvhtlldaletlgerlakqkiedhllssgkfmylegnadsa 409


RESULT  14
W83321
ID   W83321 standard; Protein; 411 AA.
XX
AC   W83321;
XX
DT   16-MAR-1999  (first entry)
XX
DE   Human Apo-2 protein.
XX
KW   Human; Apo-2; receptor; apoptosis; neurodegenerative disease; cancer;
KW   tumour necrosis factor; TNF; tumour necrosis factor receptor; TNFR;
KW   TNF cytokine.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 410
FT                   /label= unknown
FT                   /note= "encoded by WTG"
XX
PN   WO9851793-A1.
XX
PD   19-NOV-1998.
XX
PF   14-MAY-1998;   98WO-US09704.
XX
PR   09-FEB-1998;   98US-0020746.
PR   15-MAY-1997;   97US-0857216.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Adams CW,  Ashkenazi AJ,  Chuntharapai A,  Kim KJ;
XX
DR   WPI; 1999-045228/04.
DR   N-PSDB; V72526.
XX
PT   Human Apo-2 polypeptide inducing apoptosis - useful to treat
PT   conditions linked with decreased apoptosis e.g. cancer, and produce
PT   antibodies to increase or decrease apoptosis
XX
PS   Claim 1; Fig 1; 134pp; English.
XX
CC   The present sequence represents human Apo-2. Apo-2 can be used
CC   therapeutically to induce apoptosis in mammalian cells, and so is useful
CC   to treat conditions associated with decreased apoptosis e.g. cancer.
CC   Apo-2 is believed to be a new tumour necrosis factor (TNF) receptor
CC   (TNFR). TNF cytokines can induce apoptosis, thought to be initiated by
CC   binding to TNFRs, and Apo-2 triggered caspase-dependent apoptosis. It
CC   can be used to identify agents activating Apo-2, useful to treat
CC   mammalian cancer cells, and to produce Apo-2 chimeras useful
CC   therapeutically (e.g. those containing immunoglobulin sequences can be
CC   inhibit apoptosis) or diagnostically (e.g. those comprising an epitope
CC   tag polypeptide allow Apo-2 detection and purification using anti-tag
CC   antibodies). It can be used to produce antibodies which can be combined
CC   with a (particularly pharmaceutically acceptable) carrier in compositions
CC   or used to produce dimeric molecules (especially homodimeric molecules
CC   comprising first and second Apo-2 antibodies). Agonistic (especially
CC   single-chain) antibodies can be administered to induce apoptosis in
CC   mammalian cancer cells, and antagonistic antibodies used to block
CC   excessive apoptosis (e.g. in neurodegenerative diseases). Apo-2
CC   antibodies may also be used diagnostically e.g. to detect Apo-2
CC   expression in cells/tissues and in Apo-2 purification.
XX
SQ   Sequence   411 AA;


  Query Match             51.6%;  Score 227;  DB 20;  Length 411;
  Best Local Similarity   100.0%;  Pred. No. 4.9e-208;
  Matches  227;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     212 SGIIIGVTVAAVVLIVAVFVCKSLLWKKVLPYLKGICSGGGGDPERVDRSSQRPGAEDNV 271
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     183 sgiiigvtvaavvlivavfvcksllwkkvlpylkgicsggggdpervdrssqrpgaednv 242

Qy     272 LNEIVSILQPTQVPEQEMEVQEPAEPTGVNMLSPGESEHLLEPAEAERSQRRRLLVPANE 331
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     243 lneivsilqptqvpeqemevqepaeptgvnmlspgesehllepaeaersqrrrllvpane 302

Qy     332 GDPTETLRQCFDDFADLVPFDSWEPLMRKLGLMDNEIKVAKAEAAGHRDTLYTMLIKWVN 391
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     303 gdptetlrqcfddfadlvpfdsweplmrklglmdneikvakaeaaghrdtlytmlikwvn 362

Qy     392 KTGRDASVHTLLDALETLGERLAKQKIEDHLLSSGKFMYLEGNADSA 438
           |||||||||||||||||||||||||||||||||||||||||||||||
Db     363 ktgrdasvhtlldaletlgerlakqkiedhllssgkfmylegnadsa 409


RESULT  15
Y55805
ID   Y55805 standard; Protein; 411 AA.
XX
AC   Y55805;
XX
DT   29-FEB-2000  (first entry)
XX
DE   Human Apo-2 polypeptide.
XX
KW   Apo-2 polypeptide; immunization; antigen; polyclonal antibody; cancer;
KW   monoclonal antibody; Apo-2L receptor; therapy; apoptosis; autoimmune;
KW   immune-mediated cell death; neurodegenerative; inflammatory.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 410
FT                   /label= unknown
FT                   /note= "encoded by WTG"
XX
PN   WO9964461-A2.
XX
PD   16-DEC-1999.
XX
```

```
PF   10-JUN-1999;   99WO-US13197.
XX
PR   12-JUN-1998;   98US-0096637.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Chuntharapai A,  Kim KJ;
XX
DR   WPI; 2000-097520/08.
DR   N-PSDB; Z39630.
XX
PT   Preparation of antibodies using 2 or more different antigens, used for
PT   producing antibodies against Apo-2 ligand receptors useful for inducing
PT   apoptosis, particularly in cancer cells -
XX
PS   Disclosure; Fig 5; 57pp; English.
XX
CC   The invention provides a method for producing antibodies (Abs) by
CC   immunizing an animal with at least two different antigens. The method
CC   comprises: (a) immunizing an animal with at least two different antigens,
CC   to generate polyclonal Abs against each antigen in the animal; (b)
CC   preparing monoclonal Abs (MAbs) using immune cells of the above animal;
CC   and(c) screening the MAbs to identify one or more MAbs which bind to each
CC   antigen. The Abs obtained are Apo-2L receptor (ant)agonists and can be
CC   used for therapy. The Apo-2L receptor Abs can be used for enhancing
CC   immune-mediated cell death in cells expressing Apo-2L receptors.
CC   Agonistic Abs which specifically cross-react with 2 or more different
CC   Apo-2L receptors can be used for inducing apoptosis in mammalian cancer
CC   cells. Antagonistic Abs can be used for blocking apoptosis, e.g. in
CC   neurodegenerative disease, or to block potential autoimmune/inflammatory
CC   effects of Apo-2 resulting from NF-approx.kB activation. The Abs can also
CC   be used for detection, diagnosis and affinity purification. The method
CC   can reduce the number of animals that need to be immunized and sacrificed
CC   in order to make 2 or more MAbs with differing antigen-binding
CC   specificities. The present sequence represents a human Apo-2 polypeptide.
XX
SQ   Sequence   411 AA;


  Query Match             51.6%;  Score 227;  DB 21;  Length 411;
  Best Local Similarity   100.0%;  Pred. No. 4.9e-208;
  Matches  227;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     212 SGIIIGVTVAAVVLIVAVFVCKSLLWKKVLPYLKGICSGGGGDPERVDRSSQRPGAEDNV 271
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     183 sgiiigvtvaavvlivavfvcksllwkkvlpylkgicsggggdpervdrssqrpgaednv 242

Qy     272 LNEIVSILQPTQVPEQEMEVQEPAEPTGVNMLSPGESEHLLEPAEAERSQRRRLLVPANE 331
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     243 lneivsilqptqvpeqemevqepaeptgvnmlspgesehllepaeaersqrrrllvpane 302

Qy     332 GDPTETLRQCFDDFADLVPFDSWEPLMRKLGLMDNEIKVAKAEAAGHRDTLYTMLIKWVN 391
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     303 gdptetlrqcfddfadlvpfdsweplmrklglmdneikvakaeaaghrdtlytmlikwvn 362

Qy     392 KTGRDASVHTLLDALETLGERLAKQKIEDHLLSSGKFMYLEGNADSA 438
           |||||||||||||||||||||||||||||||||||||||||||||||
Db     363 ktgrdasvhtlldaletlgerlakqkiedhllssgkfmylegnadsa 409


RESULT  16
B26992
ID   B26992 standard; Protein; 67 AA.
XX
AC   B26992;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human DR5 death domain.
XX
KW   Human; tumour necrosis factor; TNF; TR9 receptor; immunosuppressive;
KW   antiinflammatory; cardiant; antiasthmatic; antidiabetic; antiallergic;
KW   antiathritic; antirheumatic; anti-HIV; anticonvulsant; cytostatic;
KW   neuroprotective; gene therapy; Death Domain Containing Receptor 6;
KW   common variable immunodeficiency; X-linked agammaglobulinaemia;
KW   severe combined immunodeficiency; Wiskott-Aldrich syndrome;
KW   autoimmune disease; rheumatoid arthritis; allergic encephalomyelitis;
KW   multiple sclerosis; diabetes mellitus; asthma; epilepsy; cancer;
KW   cardiovascular disease; neurological disease; protein coordinate data;
KW   osteoprotegerin; DR5.
XX
OS   Homo sapiens.
XX
PN   WO200056862-A1.
XX
PD   28-SEP-2000.
XX
PF   16-MAR-2000; 2000WO-US06831.
XX
PR   24-MAR-1999;   99US-0126019.
PR   14-MAY-1999;   99US-0134220.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Ni J,  Gentz RL,  Yu G,  Fan P;
XX
DR   WPI; 2000-594575/56.
XX
PT   Nucleic acid molecule encoding a human tumor necrosis factor receptor,
PT   known as TR9, useful for treating, preventing and diagnosing severe
PT   combined immunodeficiency, autoimmune diseases, HIV infection, epilepsy
PT   and cancer -
XX
PS   Disclosure; Fig 4C; 220pp; English.
XX
CC   The present sequence is the death domain of DR5. It was used for
CC   comparison to a domain of a novel human tumour necrosis factor receptor,
CC   designated TR9. The TR9 receptor is also known as Death Domain Containing
CC   Receptor 6. TR9 polypeptides, polynucleotides or agonists are useful for
CC   treating, preventing or diagnosing common variable immunodeficiency,
CC   X-linked agammaglobulinaemia, severe combined immunodeficiency and
CC   Wiskott-Aldrich syndrome, autoimmune diseases (such as rheumatoid
CC   arthritis, allergic encephalomyelitis, multiple sclerosis, diabetes
CC   mellitus and asthma), HIV infection, epilepsy, cancer, cardiovascular
CC   diseases and other neurological diseases.
XX
SQ   Sequence   67 AA;


  Query Match             15.2%;  Score 67;  DB 21;  Length 67;
  Best Local Similarity   100.0%;  Pred. No. 3.2e-56;
  Matches   67;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     353 SWEPLMRKLGLMDNEIKVAKAEAAGHRDTLYTMLIKWVNKTGRDASVHTLLDALETLGER 412
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1 sweplmrklglmdneikvakaeaaghrdtlytmlikwvnktgrdasvhtlldaletlger 60

Qy     413 LAKQKIE 419
           |||||||
Db      61 lakqkie 67


RESULT  17
W93577
ID   W93577 standard; Protein; 410 AA.
XX
AC   W93577;
XX
DT   18-JUN-1999  (first entry)
XX
DE   Human APORP protein.
XX
KW   Tumour necrosis factor receptor; signal transducer molecule; TNF; APO4;
KW   developmental abnormality; gestational abnormalitity; prostate cancer;
KW   APO6; APO8; APO9; TNRL-1; TNRL-3; diagnosis; treatment; therapy; disease;
KW   cytoplasmic domain; immunogen; antibody preparation; breast carcinoma;
```

KW apoptosis; human; APORP; APO-related protein.
XX
OS Homo sapiens.
XX
PN WO9911791-A2.
XX
PD 11-MAR-1999.
XX
PF 04-SEP-1998; 98WO-US18393.
XX
PR 05-SEP-1997; 97US-0924634.
XX
PA (UNIW) UNIV WASHINGTON.
XX
PI Chaudhary PM;
XX
DR WPI; 1999-205191/17.
DR N-PSDB; X23411.
XX
PT New Tumor Necrosis Factor family receptor polypeptides and ligands -
PT useful for diagnosis and treatment of prostate cancer and
PT developmental or gestational abnormalities
XX
PS Example 1; Fig 3; 156pp; English.
XX
CC This invention describes isolated Tumor Necrosis Factor (TNF) family
CC receptor polypeptides: APO4, APO6, APO8 and APO9 or their active
CC fragments, and isolated TNF related ligands 1 and 3 (TNRL1 and TNRL3) or
CC their active fragments. APO4 is useful for diagnosing prostate cancer
CC by determining levels of APO4 in an individual. Prostate cancer can also
CC be treated using APO4 selective binding agents linked to a therapeutic
CC moiety. APO4 polypeptides are also useful for identifying selective
CC binding agents, useful in diagnosis/treatment of disease by binding of
CC agents to the polypeptide/active fragment which is extracellular, or
CC expressed on the cell surface. The binding is preferably performed in
CC vivo. APO4 polypeptides/ active fragments are also useful for screening
CC for agonists and antagonists by binding and observing the changer in APO4
CC activity. Effective pharmacological agents useful in diagnosis or
CC treatment of disease are also identified using APO4 polypeptides/active
CC fragments and APO4 signal transducer molecules that specifically interact
CC with a cytoplasmic domain of APO4 and detecting a change in level of APO4
CC activity. The method is performed in vivo or in vitro. APO polypeptides
CC are all useful as immunogens for preparing antibodies. APO4 is also
CC useful for diagnosis/treatment of developmental or gestational
CC abnormalities. APO8 was transfected to human breast carcinoma cell line
CC MCF-7, and induced apoptosis.
XX
SQ Sequence 410 AA;

Query Match 3.6%; Score 16; DB 20; Length 410;
Best Local Similarity 100.0%; Pred. No. 7e-07;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 169 DCTPWSDIECVHKESG 184
||||||||||||||||
Db 162 dctpwsdiecvhkesg 177

RESULT 18
B50896
ID B50896 standard; Protein; 467 AA.
XX
AC B50896;
XX
DT 19-MAR-2001 (first entry)
XX
DE Human DR4.
XX
KW Human; TR10 receptor; cytostatic; immunosuppressive; neuroprotective;
KW antiinflammatory; anti-HIV; antiparkinsonian; nootropic; cardiant;
KW vasotropic; antiallergic; antidiabetic; vulnerary; ophthalmological;
KW antiviral; antibacterial; antifungal; antiparasitic; gene therapy;
KW tumour necrosis factor receptor; cancer; leukaemia; autoimmune disorder;
KW apoptosis; cardiovascular disorder; inflammatory disease; wound;
KW infection; neurological disease; DR4; death domain containing receptor 4;
KW protein coordinate data.
XX
OS Homo sapiens.
XX
PN WO200073321-A1.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14554.
XX
PR 28-MAY-1999; 99US-0136786.
PR 07-JUL-1999; 99US-0142563.
PR 15-JUL-1999; 99US-0144023.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ni J;
XX
DR WPI; 2001-025250/03.
XX
PT Nucleic acid encoding a tumor necrosis factor receptor 10, useful in
PT the diagnosis, treatment or prevention of cancer, autoimmune disorders,
PT and diseases and disorders associated with apoptosis -
XX
PS Disclosure; Fig 2; 212pp; English.
XX
CC The present sequence is given in a specification relating to an isolated
CC nucleic acid encoding a human tumour necrosis factor receptor TR10.
CC The TR10 polynucleotide, polypeptide, antibodies, agonists and
CC antagonists are useful in the diagnosis, treatment or prevention of
CC cancer, such as breast and ovarian cancer and leukaemia; autoimmune
CC disorders such as multiple sclerosis, Crohn's disease and graft versus
CC host disease; diseases associated with increased apoptosis such as AIDS,
CC Alzheimer's disease and Parkinson's disease; cardiovascular disorders
CC such as limb ischaemia and congenital heart defects; inflammatory
CC diseases e.g. allergy; wound healing; disorders associated with
CC neovascularisation, e.g. diabetic retinopathy; infectious diseases such
CC as viral, bacterial, fungal and parasitic infections; and neurological
CC diseases such as amyotrophic lateral sclerosis.
XX
SQ Sequence 467 AA;

Query Match 3.6%; Score 16; DB 22; Length 467;
Best Local Similarity 100.0%; Pred. No. 7.9e-07;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 169 DCTPWSDIECVHKESG 184
||||||||||||||||
Db 220 dctpwsdiecvhkesg 235

RESULT 19
W64483
ID W64483 standard; Protein; 468 AA.
XX
AC W64483;
XX
DT 20-OCT-1998 (first entry)
XX
DE Human DR4 protein.
XX
KW Death domain containing receptor 4; DR4; apoptosis; cancer; inflammation;
KW agonist; tumour necrosis factor; TNF; ligand; autoimmune disease;
KW infection; graft rejection; antagonist; inhibitor; diagnostic.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Peptide 1..23

```
FT                  /label= signal
FT   Protein        24..468
FT                  /label= DR4
FT   Domain         24..238
FT                  /label= extracellular_domain
FT   Domain         239..264
FT                  /label= transmembrane_domain
FT   Domain         265..468
FT                  /label= intracellular_domain
FT   Domain         379..422
FT                  /label= death_domain
XX
PN   WO9832856-A1.
XX
PD   30-JUL-1998.
XX
PF   27-JAN-1998;   98WO-US01464.
XX
PR   05-FEB-1997;   97US-0037829.
PR   28-JAN-1997;   97US-0035722.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
PA   (UNMI ) UNIV MICHIGAN.
XX
PI   Dixit VM,  Gentz RL,  Ni J,  Pan JG,  Rosen CA;
XX
DR   WPI; 1998-427952/36.
DR   N-PSDB; V49527.
XX
PT   Nucleic acid encoding human death domain-containing receptor 4 -
PT   useful for therapeutic modulation of apoptosis, in e.g. cancer and
PT   autoimmune diseases
XX
PS   Claim 1a; Fig 1; 92pp; English.
XX
CC   This sequence represents a human death domain containing receptor 4, DR4.
CC   DR4 agonists are used to increase apoptosis induced by tumour necrosis
CC   factor (TNF)-family ligands, e.g. in cases of cancer, autoimmune disease,
CC   viral or other infections, inflammation, graft vs. host disease, acute or
CC   chronic graft rejection. Antagonists of DR4 are used to inhibit such
CC   apoptosis, e.g. in cases of acquired immune deficiency syndrome,
CC   neurodegenerative disease, myelodysplastic syndrome, ischaemic injury,
CC   toxin-induced liver damage, septic shock, cachexia and anorexia, also a
CC   wide range of inflammatory conditions. DR4 of fragments of the protein
CC   are used diagnostically, e.g. to detect mutant forms of DR4 (possibly
CC   associated with disease), for isolating the DR4 gene or related sequences
CC   and for chromosomal mapping.
XX
SQ   Sequence   468 AA;


  Query Match             3.6%;  Score 16;  DB 19;  Length 468;
  Best Local Similarity   100.0%;  Pred. No. 7.9e-07;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    169 DCTPWSDIECVHKESG 184
          ||||||||||||||||
Db    220 dctpwsdiecvhkesg 235


RESULT  20
Y31602
ID   Y31602 standard; Protein; 468 AA.
XX
AC   Y31602;
XX
DT   09-NOV-1999  (first entry)
XX
DE   Human death receptor-4.
XX
KW   TNF receptor; tumour necrosis factor receptor; cell surface receptor;
KW   antibody; Apo-2 ligand; TRAIL ligand; apoptosis; DR4; cancer.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Domain          1..218
FT                   /label= extracellular
XX
PN   WO9937684-A1.
XX
PD   29-JUL-1999.
XX
PF   25-JAN-1999;   99WO-US01437.
XX
PR   26-JAN-1998;   98US-0072481.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Chuntharapai A,  Kim KJ;
XX
DR   WPI; 1999-469117/39.
DR   N-PSDB; Z08960.
XX
PT   New antibodies to death receptor-4, used for modulating activities
PT   associated with Apo-2 ligand, particularly apoptosis, useful for
PT   treating diseases and pathological conditions, e.g. cancer
XX
PS   Disclosure; Fig 1; 21pp; English.
XX
CC   The present sequence is a human death receptor-4 (DR4) protein, a
CC   member of the tumour necrosis factor receptor family which is involved in
CC   apoptosis induction.  DR4 is also thought to be a TRAIL and Apo-2
CC   ligand.  The protein is used to produce antibodies (monoclonal or
CC   chimeric) that specifically bind to DR4.  The DR4 antibodies may be
CC   agonistic, antagonistic or blocking antibodies. The DR4 antibodies are
CC   capable of modulating biological activities associated with Apo-2 ligand,
CC   in particular, apoptosis, and thus are useful in the treatment of various
CC   diseases and pathological conditions, including cancer. The antibodies
CC   can also be used for disease detection and diagnosis.
XX
SQ   Sequence   468 AA;


  Query Match             3.6%;  Score 16;  DB 20;  Length 468;
  Best Local Similarity   100.0%;  Pred. No. 7.9e-07;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    169 DCTPWSDIECVHKESG 184
          ||||||||||||||||
Db    220 dctpwsdiecvhkesg 235


RESULT  21
W93609
ID   W93609 standard; Protein; 468 AA.
XX
AC   W93609;
XX
DT   18-JUN-1999  (first entry)
XX
DE   Human DR4 protein.
XX
KW   Killer protein; adriamycin inducible; human; chromosome 8p21; diagnosis;
KW   p53-inducible; apoptosis-mediating activity; treatment; animal model;
KW   neoplastic disease; DR4.
XX
OS   Homo sapiens.
XX
PN   WO9902653-A1.
XX
PD   21-JAN-1999.
XX
PF   10-JUL-1998;   98WO-US14495.
XX
PR   11-MAR-1998;   98US-0077661.
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PR   11-JUL-1997;   97US-0052305.
PR   04-AUG-1997;   97US-0054710.
PR   30-SEP-1997;   97US-0060473.
PR   11-MAR-1998;   98US-0077526.
PR   11-MAR-1998;   98US-0077628.
XX
PA   (UYPE-) UNIV PENNSYLVANIA.
XX
PI   El-Deiry WS;
XX
DR   WPI; 1999-120857/10.
XX
PT   A new nucleic acid encodes a p53-induced protein (Killer) - which
PT   induces apoptosis and is useful in the diagnosis and treatment of
PT   neoplastic diseases
XX
PS   Disclosure; Page 45; 65pp; English.
XX
CC   This invention describes a novel human adriamycin-inducible killer
CC   protein located on chromosome 8p21, which also has p53-inducible,
CC   apoptosis-mediating activity and comprises an amino-terminal
CC   extracellular receptor, transmembrane and death domains. The nucleic
CC   acid molecule which encodes the protein, it's encoded signal
CC   transduction protein and antibodies of the invention are useful in the
CC   diagnosis and treatment of neoplastic diseases. The invention is also
CC   useful for the production of animal model systems.
XX
SQ   Sequence   468 AA;


  Query Match             3.6%;  Score 16;  DB 20;  Length 468;
  Best Local Similarity   100.0%;  Pred. No. 7.9e-07;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    169 DCTPWSDIECVHKESG 184
          ||||||||||||||||
Db    220 dctpwsdiecvhkesg 235


RESULT  22
Y72022
ID   Y72022 standard; Protein; 468 AA.
XX
AC   Y72022;
XX
DT   28-MAR-2001  (first entry)
XX
DE   Human Death Domain Containing Receptor-4 (DR4) protein.
XX
KW   Human; Death Domain Containing Receptor-4; DR4; immunosuppressive;
KW   cytostatic; antiviral; therapy; graft versus host disease; apoptosis;
KW   viral infection; cancer; leukaemia; autoimmune disorder; gene therapy;
KW   Tumour Necrosis Factor; TNF; diabetes mellitus; Parkinson's disease;
KW   neurodegenerative disorder; Alzheimer's disease; ischaemic injury;
KW   myelodysplastic syndrome; AIDS; Acquired Immune Deficiency Syndrome;
KW   toxin-induced liver disease; septic shock; cachexia; anorexia; SLE;
KW   systemic lupus erythematosus; immune deficiency disorder; melanoma;
KW   inflammatory disease; osteoarthritis; psoriasis; multiple sclerosis;
KW   cardiovascular disorder; peripheral artery disease; wound healing.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..23
FT                   /label= Signal_peptide
FT   Protein         24..468
FT                   /label= Mature_DR4_protein
FT   Domain          24..238
FT                   /label= Extracellular_domain
FT                   /note= "This region is specifically claimed in
FT                   claim 19"
FT   Region          35..92
FT                   /label= Antigenic_region
FT                   /note= "Used for generating DR4-specific antibodies"
FT   Region          114..160
FT                   /label= Antigenic_region
FT                   /note= "Used for generating DR4-specific antibodies"
FT   Domain          131..229
FT                   /label= Cysteine_rich_domain
FT   Region          169..240
FT                   /label= Antigenic_region
FT                   /note= "Used for generating DR4-specific antibodies"
FT   Domain          239..264
FT                   /label= Transmembrane_domain
FT   Domain          265..468
FT                   /label= Intracellular_domain
FT   Region          267..298
FT                   /label= Antigenic_region
FT                   /note= "Used for generating DR4-specific antibodies"
FT   Region          330..364
FT                   /label= Antigenic_region
FT                   /note= "Used for generating DR4-specific antibodies"
FT   Domain          379..422
FT                   /label= DR4_receptor_death_domain
FT   Region          391..404
FT                   /label= Antigenic_region
FT                   /note= "Used for generating DR4-specific antibodies"
FT   Region          418..465
FT                   /label= Antigenic_region
FT                   /note= "Used for generating DR4-specific antibodies"
XX
PN   WO200067793-A1.
XX
PD   16-NOV-2000.
XX
PF   05-MAY-2000; 2000WO-US12163.
XX
PR   06-MAY-1999;   99US-0132922.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
PA   (UNMI ) UNIV MICHIGAN.
PA   (NIJJ/) NI J.
PA   (ROSE/) ROSEN C A.
PA   (PANJ/) PAN J G.
PA   (GENT/) GENTZ R L.
PA   (DIXI/) DIXIT V M.
XX
PI   Ni J,  Rosen CA,  Pan JG,  Gentz RL,  Dixit VM;
XX
DR   WPI; 2000-687621/67.
DR   N-PSDB; D02214.
XX
PT   Treating graft versus host disease, viral infection, cancer, leukemia,
PT   immunodeficiency or an autoimmune disorder comprises administering a
PT   first and second therapeutic agent -
XX
PS   Claim 1; Page 260-261; 269pp; English.
XX
CC   The present sequence is a human Death Domain Containing Receptor-4 (DR4)
CC   protein. DR4 is a member of Tumour Necrosis Factor (TNF) receptor family.
CC   DR4 agonists are useful in the prevention and treatment of diseases
CC   associated with inhibition of apoptosis and increased cell survival.
CC   The DR4 antagonists are useful in the prevention and treatment of
CC   diseases associated with increased apoptotic cell death. The DR4 agonists
CC   and antagonists are useful in the treatment of diseases like diabetes
CC   mellitus, AIDS, neurodegenerative disorders (Parkinson's disease,
CC   Alzheimer's disease), myelodysplastic syndromes, ischaemic injury,
CC   toxin-induced liver diseases, septic shock, cachexia, anorexia, graft
CC   versus host disease, inflammatory disease (osteoarthritis, psoriasis),
CC   wound healing, autoimmune disease (multiple sclerosis, systemic lupus
CC   erythematosus-SLE), T-cell leukaemias, viral infection (herpes viruses,
CC   pox virus), immune deficiency disorde, cancer (follicular lymphomas,
CC   melanoma) and cardiovascular disorders including peripheral artery
CC   disease such as limb ischaemia. DR4 sequences are also useful in gene
CC   therapy.
CC   Note: This sequence is stated as being the same as that shown in
```

```
CC   Figure-1 (Y72023) of the specification. However the sequences differ
CC   at position 462.
XX
SQ   Sequence   468 AA;


  Query Match             3.6%;  Score 16;  DB 21;  Length 468;
  Best Local Similarity   100.0%;  Pred. No. 7.9e-07;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     169 DCTPWSDIECVHKESG 184
           ||||||||||||||||
Db     220 dctpwsdiecvhkesg 235


RESULT  23
Y72023
ID   Y72023 standard; Protein; 468 AA.
XX
AC   Y72023;
XX
DT   28-MAR-2001  (first entry)
XX
DE   Human Death Domain Containing Receptor-4 protein, alternative version.
XX
KW   Human; Death Domain Containing Receptor-4; DR4; immunosuppressive;
KW   cytostatic; antiviral; therapy; graft versus host disease; apoptosis;
KW   viral infection; cancer; leukaemia; autoimmune disorder; gene therapy;
KW   Tumour Necrosis Factor; TNF; diabetes mellitus; Parkinson's disease;
KW   neurodegenerative disorder; Alzheimer's disease; ischaemic injury;
KW   myelodysplastic syndrome; AIDS; Acquired Immune Deficiency Syndrome;
KW   toxin-induced liver disease; septic shock; cachexia; anorexia; SLE;
KW   systemic lupus erythematosus; immune deficiency disorder; melanoma;
KW   inflammatory disease; osteoarthritis; psoriasis; multiple sclerosis;
KW   cardiovascular disorder; peripheral artery disease; wound healing.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..23
FT                   /label= Signal_peptide
FT   Protein         24..468
FT                   /label= Mature_DR4_protein
FT   Domain          24..238
FT                   /label= Extracellular_domain
FT                   /note= "This region is specifically claimed in
FT                   claim 19"
FT   Region          35..92
FT                   /label= Antigenic_region
FT                   /note= "Used for generating DR4-specific antibodies"
FT   Region          114..160
FT                   /label= Antigenic_region
FT                   /note= "Used for generating DR4-specific antibodies"
FT   Domain          131..229
FT                   /label= Cysteine_rich_domain
FT   Region          169..240
FT                   /label= Antigenic_region
FT                   /note= "Used for generating DR4-specific antibodies"
FT   Domain          239..264
FT                   /label= Transmembrane_domain
FT   Domain          265..468
FT                   /label= Intracellular_domain
FT   Region          267..298
FT                   /label= Antigenic_region
FT                   /note= "Used for generating DR4-specific antibodies"
FT   Region          330..364
FT                   /label= Antigenic_region
FT                   /note= "Used for generating DR4-specific antibodies"
FT   Domain          379..422
FT                   /label= DR4_receptor_death_domain
FT   Region          391..404
FT                   /label= Antigenic_region
FT                   /note= "Used for generating DR4-specific antibodies"
FT   Region          418..465
FT                   /label= Antigenic_region
FT                   /note= "Used for generating DR4-specific antibodies"
FT   Misc-difference 462
FT                   /note= "Encoded by GGC"
XX
PN   WO200067793-A1.
XX
PD   16-NOV-2000.
XX
PF   05-MAY-2000; 2000WO-US12163.
XX
PR   06-MAY-1999;   99US-0132922.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
PA   (UNMI ) UNIV MICHIGAN.
PA   (NIJJ/) NI J.
PA   (ROSE/) ROSEN C A.
PA   (PANJ/) PAN J G.
PA   (GENT/) GENTZ R L.
PA   (DIXI/) DIXIT V M.
XX
PI   Ni J,  Rosen CA,  Pan JG,  Gentz RL,  Dixit VM;
XX
DR   WPI; 2000-687621/67.
DR   N-PSDB; D02214.
XX
PT   Treating graft versus host disease, viral infection, cancer, leukemia,
PT   immunodeficiency or an autoimmune disorder comprises administering a
PT   first and second therapeutic agent -
XX
PS   Claim 1; Fig 1; 269pp; English.
XX
CC   The present sequence is an alternative version of human Death Domain
CC   Containing Receptor-4 (DR4) protein. DR4 is a member of Tumour
CC   Necrosis Factor (TNF) receptor family. DR4 agonists are useful
CC   in the prevention and treatment of diseases associated with inhibition
CC   of apoptosis and increased cell survival. The DR4 antagonists are
CC   useful in the prevention and treatment of diseases associated with
CC   increased apoptotic cell death. The DR4 agonists and antagonists
CC   are useful in the treatment of diseases like diabetes mellitus, AIDS,
CC   neurodegenerative disorders (Parkinson's disease, Alzheimer's disease),
CC   myelodysplastic syndromes, ischaemic injury, toxin-induced liver
CC   diseases, septic shock, cachexia, anorexia, graft versus host disease,
CC   inflammatory disease (osteoarthritis, psoriasis), autoimmune disease
CC   (multiple sclerosis, systemic lupus erythematosus-SLE), wound healing,
CC   T-cell leukaemias, viral infection (herpes viruses, pox virus), immune
CC   deficiency disorder, cancer (follicular lymphomas, melanoma) and
CC   cardiovascular disorders including peripheral artery disease such as
CC   limb ischaemia. DR4 sequences are also useful in gene therapy.
CC   Note: This sequence is stated as being the same as SEQ ID NO: 2
CC   (Y72022) shown in sequence listing of the specification. However
CC   the sequences differ at position 462.
XX
SQ   Sequence   468 AA;


  Query Match             3.6%;  Score 16;  DB 21;  Length 468;
  Best Local Similarity   100.0%;  Pred. No. 7.9e-07;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     169 DCTPWSDIECVHKESG 184
           ||||||||||||||||
Db     220 dctpwsdiecvhkesg 235


RESULT  24
B08546
ID   B08546 standard; Protein; 468 AA.
XX
AC   B08546;
XX
DT   20-DEC-2000  (first entry)
```

XX
DE Amino acid sequence of a human TRAIL receptor polypeptide.
XX
KW Human; TRAIL; tumour necrosis factor; TNF; diterpenoid triepoxide;
KW TNF related apoptosis-inducing ligand; tumour cell; TRAIL receptor;
KW TRAIL receptor ligand; solid tumour; carcinoma; mammary carcinoma;
KW non-small cell lung carcinoma.
XX
OS Homo sapiens.
XX
PN WO200048619-A1.
XX
PD 24-AUG-2000.
XX
PF 15-FEB-2000; 2000WO-US03891.
XX
PR 16-FEB-1999; 99US-0120313.
XX
PA (STRD) UNIV LELAND STANFORD JUNIOR.
XX
PI Rosen GD;
XX
DR WPI; 2000-558253/51.
DR N-PSDB; A64326.
XX
PT Killing of tumour cells, e.g. solid tumours or carcinoma, comprises
PT administration of synergistic combination of diterpenoid diepoxide and
PT tumour necrosis factor related apoptosis-inducing ligand -
XX
PS Disclosure; Page 26-27; 29pp; English.
XX
CC The present sequence represents a human TRAIL (tumour necrosis factor
CC (TNF) related apoptosis-inducing ligand) receptor. The specification
CC describes a method for enhanced killing of tumour cells. The method
CC comprises contacting a susceptible tumour cell with a synergistic mixture
CC of a TRAIL receptor ligand and a diterpenoid triepoxide in a combined
CC dosage to kill at least 50 % of the cells. This mixture is synergistic,
CC and so is active at lower doses and against otherwise resistant cell
CC lines. The method is used for killing tumour cells, especially solid
CC tumours or carcinomas (especially mammary carcinoma or non-small cell
CC lung carcinoma).
XX
SQ Sequence 468 AA;

Query Match 3.6%; Score 16; DB 21; Length 468;
Best Local Similarity 100.0%; Pred. No. 7.9e-07;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 169 DCTPWSDIECVHKESG 184
||||||||||||||||
Db 220 dctpwsdiecvhkesg 235

RESULT 25
B01339
ID B01339 standard; Protein; 468 AA.
XX
AC B01339;
XX
DT 25-SEP-2000 (first entry)
XX
DE TNF-related apopotosis inducing ligand (TRAIL) receptor-1.
XX
KW UL144; death receptor; apoptosis; programmed cell death; FAS;
KW TNF-R1; TRAMP; DR-6; TRAIL; modulation; treatment; cancer; virus;
KW human.
XX
OS Homo sapiens.
XX
PN WO200034335-A2.
XX
PD 15-JUN-2000.
XX
PF 03-DEC-1999; 99WO-US26035.
XX
PR 04-DEC-1998; 98US-0205018.
XX
PA (SCHE) SCHERING CORP.
XX
PI Leong C, Phillips JH;
XX
DR WPI; 2000-423383/36.
XX
PT Purified or recombinant polypeptide for modulating apoptosis comprises
PT a sequence which binds to an antibody specific for UL144 or its
PT fragments
XX
PS Disclosure; Page 70-71; 76pp; English.
XX
CC A pure or recombinant polypeptide which binds to a polyclonal antibody
CC specific for the mature UL144 is useful for screening molecules which
CC block induction of apoptosis or interfere with antiapoptotic activity.
CC The polypeptide is also useful for modulating apoptosis and useful in
CC treatment of conditions associated with abnormal physiology or
CC development, such as cancer or degenerative conditions and for
CC regulation of viral infection and replication. At least five
CC different death receptors are known, which include the CD95
CC (Fas/APO-1), the TNF receptor-1, TNF receptor apoptosis-mediated
CC protein (TRAMP), death receptor-6 (DR-6), and TNF-related
CC apoptosis-inducing ligand (TRAIL) receptors 1, 2 and 4.
XX
SQ Sequence 468 AA;

Query Match 3.6%; Score 16; DB 21; Length 468;
Best Local Similarity 100.0%; Pred. No. 7.9e-07;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 169 DCTPWSDIECVHKESG 184
||||||||||||||||
Db 220 dctpwsdiecvhkesg 235

RESULT 26
B49241
ID B49241 standard; protein; 468 AA.
XX
AC B49241;
XX
DT 15-MAR-2001 (first entry)
XX
DE Human DR4 protein.
XX
KW Anti-Death receptor 4; DR4; antibody; apoptosis; cancer; arthritis;
KW autoimmune.
XX
OS Homo sapiens.
XX
PN WO200073349-A1.
XX
PD 07-DEC-2000.
XX
PF 25-MAY-2000; 2000WO-US14599.
XX
PR 28-MAY-1999; 99US-0322875.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Chuntharapai A, Dodge KH, Kim KJ;
XX
DR WPI; 2001-041145/05.
XX
PT Novel anti-death receptor 4 antibodies useful for treating cancer and
PT immune related disorders such as rheumatoid arthritis, sjogren's
PT syndrome, Grave's disease and diabetes mellitus -

```
XX
PS   Disclosure; Fig 1; 126pp; English.
XX
CC   The present invention relates to an anti-Death receptor 4 (DR4)
CC   antibody. The antibodies of the invention are useful for inducing
CC   apoptosis in mammalian cancer cells such as colon cancer cells and
CC   for treating an immune-related disease in a mammal such as arthritis
CC   and autoimmune disease.
XX
SQ   Sequence   468 AA;


  Query Match             3.6%;  Score 16;  DB 22;  Length 468;
  Best Local Similarity   100.0%;  Pred. No. 7.9e-07;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    169 DCTPWSDIECVHKESG 184
          ||||||||||||||||
Db    220 dctpwsdiecvhkesg 235


RESULT  27
W98200
ID   W98200 standard; Protein; 386 AA.
XX
AC   W98200;
XX
DT   05-JUL-1999  (first entry)
XX
DE   RTD, inhibitor of Apo-2 ligand-induced apoptosis.
XX
KW   RTD; tumour necrosis factor receptor; trail receptor; Apo-2 ligand;
KW   apoptosis.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..55
FT                   /note= "signal peptide"
FT   Protein         56..386
FT                   /note= "mature protein"
FT   Domain          56..212
FT                   /note= "extracellular domain, specifically claimed
FT                    in Claim 6"
FT   Domain          213..232
FT                   /note= "transmembrane domain"
FT   Domain          233..386
FT                   /note= "intracellular domain"
FT   Modified-site   127
FT                   /note= "N-glycosylated"
FT   Modified-site   171
FT                   /note= "N-glycosylated"
FT   Modified-site   182
FT                   /note= "N-glycosylated"
FT   Misc-difference 310
FT                   /label= Ser, Leu
FT   Domain          99..139
FT                   /note= "cysteine-rich domain"
FT   Domain          141..180
FT                   /note= "cysteine-rich domain"
FT   Protein         1..212
FT                   /note= "extracellular domain polypeptide,
FT                          specifically claimed in Claim 7"
FT   Protein         99..139
FT                   /note= "extracellular domain polypeptide,
FT                          specifically claimed in Claim 8"
FT   Protein         141..180
FT                   /note= "extracellular domain polypeptide,
FT                          specifically claimed in Claim 9"
XX
PN   WO9910484-A1.
XX
PD   04-MAR-1999.
XX
PF   14-JUL-1998;   98WO-US14552.
XX
PR   26-AUG-1997;   97US-0918874.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Gurney A;
XX
DR   WPI; 1999-254218/21.
DR   N-PSDB; X25093.
XX
PT   A new polypeptide, designated RTD
XX
PS   Claim 4; Page 40-52; 58pp; English.
XX
CC   The present sequence is human RTD, a novel protein capable of
CC   binding Apo-2 ligand.  RTD is a receptor for tumour necrosis
CC   factor, belonging to the family of trail receptors.  It is an
CC   inhibitor of Apo-2 ligand-induced apoptosis, and acts as a decoy
CC   receptor, lacking an intracellular signalling death domain.  RTD
CC   polypeptides can be obtained by expressing the polypeptide
CC   encoded by the cDNA insert of the vectors deposited as ATCC 209201
CC   or ATCC 209202 (see also X25093).  These cDNAs differ in sequence
CC   at a single nucleotide, resulting in serine or leucine at amino
CC   acid position 310 of RTD.  Isolated RTD polypeptides, especially
CC   the extracellular domain (ECD), chimeric molecules including RTD or
CC   its ECD, and nucleic acids encoding such polypeptides are claimed,
CC   as are antibodies, vectors, host cells (especially CHO, yeast and
CC   E. coli cells), transgenic and knockout animals, and a method of
CC   modulating apoptosis in mammalian cells by exposing the cells to
CC   RTD polypeptide.  This therapy can be accomplished e.g. using in
CC   vivo or ex vivo gene therapy techniques.  RTD chimeric molecules
CC   comprising immunoglobulin sequences can be used to inhibit Apo-2
CC   ligand activities, e.g. apoptosis or NF-kappa B induction or the
CC   activity of another ligand to which RTD binds.
XX
SQ   Sequence   386 AA;


  Query Match             2.7%;  Score 12;  DB 20;  Length 386;
  Best Local Similarity   100.0%;  Pred. No. 0.0043;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    156 CRTGCPRGMVKV 167
          ||||||||||||
Db    158 crtgcprgmvkv 169


RESULT  28
Y04144
ID   Y04144 standard; Protein; 386 AA.
XX
AC   Y04144;
XX
DT   15-JUN-1999  (first entry)
XX
DE   Human Tango-74 protein.
XX
KW   Human; Tango-71; Tango-73; Tango-74; Tango-76; Tango-83; diagnosis;
KW   detection.
XX
OS   Homo sapiens.
XX
PN   WO9907850-A1.
XX
PD   18-FEB-1999.
XX
PF   06-AUG-1998;   98WO-US16502.
XX
PR   05-SEP-1997;   97US-0058108.
PR   06-AUG-1997;   97US-0054966.
XX
```

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PA   (MILL-) MILLENNIUM BIOTHERAPEUTICS INC.
XX
PI   Goodearl ADJ,  Holtzman DA;
XX
DR   WPI; 1999-167426/14.
DR   N-PSDB; X19957.
XX
PT   New TANGO polypeptides and nucleic acids encoding them - useful as
PT   diagnostic agents and for treating disorders caused by aberrant
PT   expression of TANGO
XX
PS   Claim 8; Fig 3; 84pp; English.
XX
CC   The present sequence represents human Tango-74. Tango polypeptides are
CC   useful for identifying compounds which bind the polypeptide via direct
CC   binding, competition binding assays or Tango-71, -73, -74, 76 or -83-
CC   mediated signal transduction. Tango polypeptides are also useful for
CC   identifying modulating compounds by determining effect on Tango activity.
CC   Tango polypeptides and nucleic acids are useful for diagnosing diseases
CC   related to aberrant expression of Tango, and Tango polypeptides are
CC   useful for raising antibodies which can be used in diagnostic assays for
CC   detection of Tango, and also for generating anti-idiotype antibodies for
CC   prevention and protection.
XX
SQ   Sequence   386 AA;


  Query Match             2.7%;  Score 12;  DB 20;  Length 386;
  Best Local Similarity   100.0%;  Pred. No. 0.0043;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    156 CRTGCPRGMVKV 167
          ||||||||||||
Db    158 crtgcprgmvkv 169


RESULT  29
W99018
ID   W99018 standard; Protein; 386 AA.
XX
AC   W99018;
XX
DT   12-MAY-1999  (first entry)
XX
DE   Human TRAIL receptor 4A.
XX
KW   Human; TRAIL; TRAIL receptor; immunoreactive; thrombotic microangiopathy;
KW   HIV infection; tumour necrosis factor related apoptosis inducing ligand;
KW   TNF related apoptosis inducing ligand; systemic lupus erythematosus;
KW   multiple sclerosis.
XX
OS   Homo sapiens.
XX
PN   WO9903992-A1.
XX
PD   28-JAN-1999.
XX
PF   10-JUL-1998;   98WO-US14410.
XX
PR   15-JUL-1997;   97US-0892119.
XX
PA   (IMMV ) IMMUNEX CORP.
XX
PI   Degli-Esposti M;
XX
DR   WPI; 1999-132236/11.
DR   N-PSDB; X18926.
XX
PT   New isolated TRAIL receptor polypeptides - used to develop products
PT   for treating e.g. thrombotic microangiopathy, multiple sclerosis,
PT   systemic lupus erythematosus or HIV infection
XX
PS   Claim 1; Fig 1; 51pp; English.
XX
CC   The present sequence is a human tumour necrosis factor (TNF)-related
CC   apoptosis-inducing ligand (TRAIL) receptor designated TRAILR4A. TRAILR
CC   proteins can be used for binding TRAIL, e.g. to measure or inhibit the
CC   biological activity of TRAIL. TRAILR proteins can be used for treating
CC   thrombotic microangiopathies, e.g. thrombotic thrombocytopenic purpura
CC   (TTP) or haemolytic-uraemic syndrome (HUS), clotting of small blood
CC   vessels in e.g. AIDS, multiple sclerosis or systemic lupus erythematosus
CC   or for reducing TRAIL-mediated death of T cells in HIV-infected patients.
CC   They can also be used to purify TRAIL or TRAIL-expressing cells or as
CC   carriers for delivering agents to cells bearing TRAIL.
XX
SQ   Sequence   386 AA;


  Query Match             2.7%;  Score 12;  DB 20;  Length 386;
  Best Local Similarity   100.0%;  Pred. No. 0.0043;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    156 CRTGCPRGMVKV 167
          ||||||||||||
Db    158 crtgcprgmvkv 169


RESULT  30
W99019
ID   W99019 standard; Protein; 386 AA.
XX
AC   W99019;
XX
DT   12-MAY-1999  (first entry)
XX
DE   Human TRAIL receptor 4B.
XX
KW   Human; TRAIL; TRAIL receptor; immunoreactive; thrombotic microangiopathy;
KW   HIV infection; tumour necrosis factor related apoptosis inducing ligand;
KW   TNF related apoptosis inducing ligand; systemic lupus erythematosus;
KW   multiple sclerosis.
XX
OS   Homo sapiens.
XX
PN   WO9903992-A1.
XX
PD   28-JAN-1999.
XX
PF   10-JUL-1998;   98WO-US14410.
XX
PR   15-JUL-1997;   97US-0892119.
XX
PA   (IMMV ) IMMUNEX CORP.
XX
PI   Degli-Esposti M;
XX
DR   WPI; 1999-132236/11.
DR   N-PSDB; X18927.
XX
PT   New isolated TRAIL receptor polypeptides - used to develop products
PT   for treating e.g. thrombotic microangiopathy, multiple sclerosis,
PT   systemic lupus erythematosus or HIV infection
XX
PS   Claim 1; Fig 2; 51pp; English.
XX
CC   The present sequence is a human tumour necrosis factor (TNF)-related
CC   apoptosis-inducing ligand (TRAIL) receptor designated TRAILR4B. TRAILR
CC   proteins can be used for binding TRAIL, e.g. to measure or inhibit the
CC   biological activity of TRAIL. TRAILR proteins can be used for treating
CC   thrombotic microangiopathies, e.g. thrombotic thrombocytopenic purpura
CC   (TTP) or haemolytic-uraemic syndrome (HUS), clotting of small blood
CC   vessels in e.g. AIDS, multiple sclerosis or systemic lupus erythematosus
CC   or for reducing TRAIL-mediated death of T cells in HIV-infected patients.
CC   They can also be used to purify TRAIL or TRAIL-expressing cells or as
CC   carriers for delivering agents to cells bearing TRAIL.
XX
```

```
SQ   Sequence   386 AA;

  Query Match             2.7%;  Score 12;  DB 20;  Length 386;
  Best Local Similarity   100.0%;  Pred. No. 0.0043;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    156 CRTGCPRGMVKV 167
          ||||||||||||
Db    158 crtgcprgmvkv 169


RESULT  31
W92792
ID   W92792 standard; Protein; 386 AA.
XX
AC   W92792;
XX
DT   12-APR-1999  (first entry)
XX
DE   Human TNF receptor TR10 protein.
XX
KW   TR10; tumour necrosis factor receptor; TNF; human; agonist; treatment;
KW   disease; apoptosis; inhibition; cancer; lymphoma; carcinoma; tumour;
KW   autoimmune disease; viral infection; inflammation; graft rejection; AIDS;
KW   graft versus host disease; antagonist; neurodegenerative disorder;
KW   myelodysplastic syndrome; ischemic injury; liver disease; drug screening;
KW   septic shock; cachexia; anorexia; detection; diagnosis.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..55
FT                   /label= signal_peptide
FT   Protein         56..386
FT                   /label= TR10
FT   Domain          56..212
FT                   /label= extracellular_domain
FT   Domain          213..230
FT                   /label= transmembrane_domain
FT   Domain          231..386
FT                   /label= intracellular_domain
XX
PN   WO9854202-A1.
XX
PD   03-DEC-1998.
XX
PF   29-MAY-1998;   98WO-US10981.
XX
PR   09-DEC-1997;   97US-0069112.
PR   30-MAY-1997;   97US-0050936.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Ni J,  Rosen CA;
XX
DR   WPI; 1999-059803/05.
DR   N-PSDB; V72101.
XX
PT   New isolated human tumour necrosis factor-like receptor TR10 - used
PT   to develop products for treating, e.g. cancers, autoimmune
PT   disorders, viral infections, inflammation, graft rejection,
PT   neurodegenerative disorders or septic shock
XX
PS   Claim 3; Fig 1A-D; 85pp; English.
XX
CC   This sequence represents a novel human tumour necrosis factor (TNF)
CC   receptor, TR10. TR10 polypeptides or agonists can be used for treating
CC   diseases and disorders associated with inhibition of apoptosis , e.g.
CC   cancers (e.g. follicular lymphomas, carcinomas with p53 mutations, and
CC   hormone-dependent tumours, such as breast cancer, prostate cancer,
CC   Kaposi's sarcoma and ovarian cancer), autoimmune disorders (e.g. systemic
CC   lupus erythematosus and immune-related glomerulonephritis rheumatoid
CC   arthritis), viral infections (e.g. herpes viruses, pox viruses and
CC   adenoviruses), inflammation, graft versus host disease, acute graft
CC   rejection and chronic graft rejection. Antagonists can be used for
CC   treating diseases and disorders associated with increased apoptosis,
CC   e.g. AIDS, neurodegenerative disorders (e.g. Alzheimer' disease,
CC   Parkinson's disease, Amyotrophic lateral sclerosis, Retinitis pigmentosa,
CC   cerebellar degeneration), myelodysplastic syndromes (e.g. aplastic
CC   anemia), ischemic injury (e.g. as caused by myocardial infarction, stroke
CC   and reperfusion injury), toxin-induced liver disease (e.g. as caused by
CC   alcohol), septic shock, cachexia and anorexia. Antagonists can also be
CC   used for treating inflammatory diseases and disorders, e.g. inflammatory
CC   bowel disease, rheumatoid arthritis, osteoarthritis, psoriasis and
CC   septicemia. The products can also be used for detection, diagnosis and
CC   drug screening.
XX
SQ   Sequence   386 AA;

  Query Match             2.7%;  Score 12;  DB 20;  Length 386;
  Best Local Similarity   100.0%;  Pred. No. 0.0043;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    156 CRTGCPRGMVKV 167
          ||||||||||||
Db    158 crtgcprgmvkv 169


RESULT  32
B01341
ID   B01341 standard; Protein; 386 AA.
XX
AC   B01341;
XX
DT   25-SEP-2000  (first entry)
XX
DE   TNF-related apopotosis inducing ligand (TRAIL) receptor-3.
XX
KW   UL144; death receptor; apoptosis; programmed cell death; FAS;
KW   TNF-R1; TRAMP; DR-6; TRAIL; modulation; treatment; cancer; virus;
KW   human.
XX
OS   Homo sapiens.
XX
PN   WO200034335-A2.
XX
PD   15-JUN-2000.
XX
PF   03-DEC-1999;   99WO-US26035.
XX
PR   04-DEC-1998;   98US-0205018.
XX
PA   (SCHE ) SCHERING CORP.
XX
PI   Leong C,  Phillips JH;
XX
DR   WPI; 2000-423383/36.
XX
PT   Purified or recombinant polypeptide for modulating apoptosis comprises
PT   a sequence which binds to an antibody specific for UL144 or its
PT   fragments
XX
PS   Disclosure; Page 73-74; 76pp; English.
XX
CC   A pure or recombinant polypeptide which binds to a polyclonal antibody
CC   specific for the mature UL144 is useful for screening molecules which
CC   block induction of apoptosis or interfere with antiapoptotic activity.
CC   The polypeptide is also useful for modulating apoptosis and useful in
CC   treatment of conditions associated with abnormal physiology or
CC   development, such as cancer or degenerative conditions and for
CC   regulation of viral infection and replication. At least five
CC   different death receptors are known, which include the CD95
CC   (Fas/APO-1), the TNF receptor-1, TNF receptor apoptosis-mediated
CC   protein (TRAMP), death receptor-6 (DR-6), and TNF-related
```

```
CC   apoptosis-inducing ligand (TRAIL) receptors 1, 2 and 4.
XX
SQ   Sequence   386 AA;


  Query Match             2.7%;  Score 12;  DB 21;  Length 386;
  Best Local Similarity   100.0%;  Pred. No. 0.0043;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     156 CRTGCPRGMVKV 167
           ||||||||||||
Db     158 crtgcprgmvkv 169


RESULT  33
Y69991
ID   Y69991 standard; Protein; 386 AA.
XX
AC   Y69991;
XX
DT   31-MAY-2000  (first entry)
XX
DE   Human receptor-associated protein from Incyte clone 3472455.
XX
KW   Human receptor-associated protein; HRAP; Incyte clone 3472455;
KW   cytostatic; immunomodulatory; antiinflammatory; cardiant; antianaemic;
KW   antiarteriosclerotic; hepatotropic; antiarthritic antirheumatic;
KW   antiasthmatic; osteopathic; antiallergic; antidiabetic; dermatological;
KW   neuroprotective; diagnosis; treatment; prevention; reproductive disorder;
KW   cardiovascular; cell proliferative; autoimmune; inflammatory; allergy;
KW   gastrointestinal; atherosclerosis; cirrhosis; leukaemia; cancer; AIDS;
KW   arthritis; anaemia; asthma; dermatitis; diabetes; osteoporosis;
KW   multiple sclerosis; irritable bowel syndrome.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   13
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   77
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   87
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   126
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   133
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   145
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   157
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   173
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   189
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   231
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   263
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   281
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   291
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   310
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   345
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   352
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   361
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   369
FT                   /note= "Potential phosphorylation site"
FT   Modified-site   127
FT                   /note= "Potential N-glycosylation site"
FT   Modified-site   182
FT                   /note= "Potential N-glycosylation site"
FT   Modified-site   277
FT                   /note= "Potential N-glycosylation site"
FT   Binding-site    185..192
FT                   /label= ATP/GTP_binding_site
FT   Region          99..180
FT                   /label= Signature_sequence
FT                   /note= "TNFR/NGFR cysteine-rich region"
XX
PN   WO200008155-A2.
XX
PD   17-FEB-2000.
XX
PF   06-AUG-1999;   99WO-US17777.
XX
PR   07-AUG-1998;   98US-0160065.
PR   01-SEP-1998;   98US-0098703.
XX
PA   (INCY-) INCYTE PHARM INC.
XX
PI   Hillman JL,  Yue H,  Lal P,  Tang YT,  Gorgone GA,  Guegler KJ;
PI   Corley NC,  Baughn MR;
XX
DR   WPI; 2000-205710/18.
DR   N-PSDB; Z50893.
XX
PT   New human receptor-associated proteins (HRAP) useful for the diagnosis,
PT   treatment and prevention of cell proliferative, autoimmune,
PT   inflammatory, reproductive, cardiovascular, and gastrointestinal
PT   disorders -
XX
PS   Claim 1; Page 78-79; 99pp; English.
XX
CC   The present sequence is a human receptor-associated protein
CC   (HRAP) from Incyte clone 3472455 obtained from LUNGNOT27 cDNA library.
CC   This sequence is expressed in musculoskeletal, cardiovascular
CC   and urologic tissues. HRAP has cytostatic, immunomodulatory,
CC   antiinflammatory, cardiant, antiarteriosclerotic, hepatotropic,
CC   antiarthritic, antirheumatic, osteopathic, antiallergic, antianaemic,
CC   antiasthmatic, antidiabetic, dermatological and neuroprotective
CC   activities. The present sequence is useful in the diagnosis, treatment
CC   and prevention of disorders associated with HRAP expression, especially
CC   cell proliferative, autoimmune/inflammatory, reproductive,
CC   cardiovascular and gastrointestinal disorders (e.g. atherosclerosis,
CC   cirrhosis, leukaemia, cancer, AIDS, arthritis, allergies, anaemia,
CC   asthma, dermatitis, diabetes, osteoporosis, multiple sclerosis and
CC   irritable bowel syndrome).
XX
SQ   Sequence   386 AA;


  Query Match             2.7%;  Score 12;  DB 21;  Length 386;
  Best Local Similarity   100.0%;  Pred. No. 0.0043;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     156 CRTGCPRGMVKV 167
           ||||||||||||
Db     158 crtgcprgmvkv 169


RESULT  34
B50892
ID   B50892 standard; Protein; 386 AA.
XX
AC   B50892;
XX
DT   19-MAR-2001  (first entry)
XX
DE   Human TR10 receptor.
XX
```

KW Human; TR10 receptor; cytostatic; immunosuppressive; neuroprotective;
KW antiinflammatory; anti-HIV; antiparkinsonian; nootropic; cardiant;
KW vasotropic; antiallergic; antidiabetic; vulnerary; ophthalmological;
KW antiviral; antibacterial; antifungal; antiparasitic; gene therapy;
KW tumour necrosis factor receptor; cancer; leukaemia; autoimmune disorder;
KW apoptosis; cardiovascular disorder; inflammatory disease; wound;
KW infection; neurological disease; protein coordinate data.
XX
OS Homo sapiens.
XX
PN WO200073321-A1.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14554.
XX
PR 28-MAY-1999; 99US-0136786.
PR 07-JUL-1999; 99US-0142563.
PR 15-JUL-1999; 99US-0144023.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ni J;
XX
DR WPI; 2001-025250/03.
DR N-PSDB; C91408.
XX
PT Nucleic acid encoding a tumor necrosis factor receptor 10, useful in
PT the diagnosis, treatment or prevention of cancer, autoimmune disorders,
PT and diseases and disorders associated with apoptosis -
XX
PS Claim 20; Fig 1; 212pp; English.
XX
CC The present sequence is given in a specification relating to an isolated
CC nucleic acid encoding a human tumour necrosis factor receptor TR10.
CC The TR10 polynucleotide, polypeptide, antibodies, agonists and
CC antagonists are useful in the diagnosis, treatment or prevention of
CC cancer, such as breast and ovarian cancer and leukaemia; autoimmune
CC disorders such as multiple sclerosis, Crohn's disease and graft versus
CC host disease; diseases associated with increased apoptosis such as AIDS,
CC Alzheimer's disease and Parkinson's disease; cardiovascular disorders
CC such as limb ischaemia and congenital heart defects; inflammatory
CC diseases e.g. allergy; wound healing; disorders associated with
CC neovascularisation, e.g. diabetic retinopathy; infectious diseases such
CC as viral, bacterial, fungal and parasitic infections; and neurological
CC diseases such as amyotrophic lateral sclerosis.
XX
SQ Sequence 386 AA;

Query Match 2.7%; Score 12; DB 22; Length 386;
Best Local Similarity 100.0%; Pred. No. 0.0043;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 156 CRTGCPRGMVKV 167
||||||||||||
Db 158 crtgcprgmvkv 169

RESULT 35
W00635
ID W00635 standard; Protein; 362 AA.
XX
AC W00635;
XX
DT 19-NOV-1996 (first entry)
XX
DE ILTV glycoprotein gI.
XX
KW Infectious laryngotracheitis virus; ILTV; herpesvirus;
KW attenuation; vector; vaccine; chicken; poultry; immunisation;
KW glycoprotein gI.
XX
OS Infectious laryngotracheitis virus.
XX
PN WO9508622-A1.
XX
PD 30-MAR-1995.
XX
PF 16-SEP-1994; 94WO-US10628.
XX
PR 24-SEP-1993; 93US-0126597.
XX
PA (SYTR) SYNTRO CORP.
XX
PI Cochran MD, Wild MA;
XX
DR WPI; 1995-139591/18.
DR N-PSDB; T33504.
XX
PT Recombinant attenuated infectious laryngotracheitis virus - for use
PT in vaccines to protect poultry from infection from the virus, also
PT methods of distinguishing between vaccinated and naturally infected
PT birds
XX
PS Example 1; Page 102-103; 177pp; English.
XX
CC The gI gene, spanning nucleotides 9874-10962 of the unique short
CC region (T33504) of infectious laryngotracheitis virus (ILTV),
CC codes for a glycoprotein (W00635) of approx. 39,7535 mol.wt.
CC The gI glycoprotein is homologous to Varicella-Zoster gI.
CC Deletion of the gI gene results in an attenuated ILTV that
CC is useful as a vaccine against ILT disease in chickens.
CC Recombinant virus deleted for gI was safe in animal trials.
CC Deletion of the gI gene serves as a negative marker to
CC distinguish vaccines from infected animals. A gene coding
CC for a foreign antigen may be inserted into the gI gene to
CC produce a recombinant multivalent vaccine.
XX
SQ Sequence 362 AA;

Query Match 2.0%; Score 9; DB 16; Length 362;
Best Local Similarity 100.0%; Pred. No. 2.9;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 216 IGVTVAAVV 224
|||||||||
Db 272 igvtvaavv 280

RESULT 36
W06787
ID W06787 standard; Protein; 362 AA.
XX
AC W06787;
XX
DT 02-JUN-1997 (first entry)
XX
DE ILTV glycoprotein gI.
XX
KW ILTV; vaccine; vector; attenuation; poultry;
KW avian infectious bronchitis virus; Newcastle disease virus;
KW infectious bursal disease virus of chickens;
KW Marek's disease virus; herpesvirus; glycoprotein gI.
XX
OS Infectious laryngotracheitis virus USDA strain 8302.
XX
FH Key Location/Qualifiers
FT Peptide 1..22
FT /label= Sig_peptide
FT Protein 23..362
FT /label= Mat_protein
FT Region 272..292
FT /label= Transmembrane_helix
XX

PN WO9629396-A1.
XX
PD 26-SEP-1996.
XX
PF 21-MAR-1996; 96WO-US03916.
XX
PR 06-JUN-1995; 95US-0468190.
PR 23-MAR-1995; 95US-0410121.
XX
PA (SYTR) SYNTRO CORP.
XX
PI Cochran MD, Wild MA;
XX
DR WPI; 1996-443172/44.
DR N-PSDB; T44384;
DR N-PSDB; T44385.
XX
PT Recombinant infectious laryngotracheitis virus with deletion in the
PT glycoprotein G, gI or US2 gene, etc. - useful for vaccines against
PT infectious laryngotracheitis in poultry
XX
PS Example 11; Page 110-111; 216pp; English.
XX
CC Glycoprotein gI (W06787) is encoded by ORF8 of the unique short
CC region (T44384) of infectious laryngotracheitis virus (ILTV). It
CC shows homology to the Varicella Zoster virus gI glycoprotein.
CC Recombinant ILTV gI protein produced in a swinepox virus reacts to
CC convalescent sera from ILTV-infected chickens. Deletion of the gI
CC gene results in an attenuated ILTV that is useful as a vaccine and
CC as a negative marker to distinguish vaccinated from infected
CC animals. Insertion of a foreign gene into the gI gene allows
CC prodn. of multivalent vaccines.
XX
SQ Sequence 362 AA;

Query Match 2.0%; Score 9; DB 17; Length 362;
Best Local Similarity 100.0%; Pred. No. 2.9;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 216 IGVTVAAVV 224
|||||||||
Db 272 igvtvaavv 280

RESULT 37
B26991
ID B26991 standard; Protein; 67 AA.
XX
AC B26991;
XX
DT 02-FEB-2001 (first entry)
XX
DE Human DR4 death domain.
XX
KW Human; tumour necrosis factor; TNF; TR9 receptor; immunosuppressive;
KW antiinflammatory; cardiant; antiasthmatic; antidiabetic; antiallergic;
KW antiathritic; antirheumatic; anti-HIV; anticonvulsant; cytostatic;
KW neuroprotective; gene therapy; Death Domain Containing Receptor 6;
KW common variable immunodeficiency; X-linked agammaglobulinaemia;
KW severe combined immunodeficiency; Wiskott-Aldrich syndrome;
KW autoimmune disease; rheumatoid arthritis; allergic encephalomyelitis;
KW multiple sclerosis; diabetes mellitus; asthma; epilepsy; cancer;
KW cardiovascular disease; neurological disease; protein coordinate data;
KW osteoprotegerin; DR4.
XX
OS Homo sapiens.
XX
PN WO200056862-A1.
XX
PD 28-SEP-2000.
XX
PF 16-MAR-2000; 2000WO-US06831.
XX
PR 24-MAR-1999; 99US-0126019.
PR 14-MAY-1999; 99US-0134220.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Ni J, Gentz RL, Yu G, Fan P;
XX
DR WPI; 2000-594575/56.
XX
PT Nucleic acid molecule encoding a human tumor necrosis factor receptor,
PT known as TR9, useful for treating, preventing and diagnosing severe
PT combined immunodeficiency, autoimmune diseases, HIV infection, epilepsy
PT and cancer -
XX
PS Disclosure; Fig 4C; 220pp; English.
XX
CC The present sequence is the death domain of DR4. It was used for
CC comparison to a domain of a novel human tumour necrosis factor receptor,
CC designated TR9. The TR9 receptor is also known as Death Domain Containing
CC Receptor 6. TR9 polypeptides, polynucleotides or agonists are useful for
CC treating, preventing or diagnosing common variable immunodeficiency,
CC X-linked agammaglobulinaemia, severe combined immunodeficiency and
CC Wiskott-Aldrich syndrome, autoimmune diseases (such as rheumatoid
CC arthritis, allergic encephalomyelitis, multiple sclerosis, diabetes
CC mellitus and asthma), HIV infection, epilepsy, cancer, cardiovascular
CC diseases and other neurological diseases.
XX
SQ Sequence 67 AA;

Query Match 1.8%; Score 8; DB 21; Length 67;
Best Local Similarity 100.0%; Pred. No. 5.7;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 388 KWVNKTGR 395
||||||||
Db 36 kwvnktgr 43

RESULT 38
W49034
ID W49034 standard; Protein; 144 AA.
XX
AC W49034;
XX
DT 06-NOV-1998 (first entry)
XX
DE Human death domain-1.
XX
KW Human death domain-1; cell death; apoptosis; neurodegenerative disorder;
KW Alzheimer's disease; ischaemic injury; myocardial infarction; AIDS;
KW osteoporosis; chronic degenerative liver disease cancer;
KW autoimmune disorder; viral infection; rheumatoid arthritis.
XX
OS Homo sapiens.
XX
PN EP857782-A2.
XX
PD 12-AUG-1998.
XX
PF 20-NOV-1997; 97EP-0309346.
XX
PR 27-JAN-1997; 97US-0789355.
XX
PA (SMIK) SMITHKLINE BEECHAM CORP.
XX
PI Emery JG;
XX
DR WPI; 1998-416005/36.
DR N-PSDB; V32819.
XX
PT New DNA encoding human cell death domain polypeptide used to

```
PT   diagnose and treat diseases associated with enhanced or inhibited
PT   activity - e.g. Alzheimer's disease, myocardial infarction, AIDS,
PT   osteoporosis, cancer and autoimmune diseases
XX
PS   Claim 1; Fig 1; 17pp; English.
XX
CC   The present sequence represents the human death domain-1 (DD-1) protein.
CC   The DD-1 cDNA was isolated from a human bone marrow cDNA library.
CC   Agonists and antagonists against DD-1 activity are claimed to be
CC   useful for treating patients in need of enhanced or inhibited DD-1
CC   activity respectively.  The DD-1 cDNA and the DD-1 protein it
CC   encodes are claimed to be useful for the treatment of diseases
CC   associated with excess or inappropriate cell death, such as
CC   neurodegenerative disorders (e.g. Alzheimer's disease), ischaemic
CC   injury (e.g. myocardial infarction), AIDS, osteoporosis, and chronic
CC   degenerative liver disease.  The DD-1 cDNA and protein are also claimed
CC   to be useful for treating diseases associated with an inhibition of
CC   apoptosis such as cancer, autoimmune disorders and viral infections
CC   and in the treatment of chronic inflammation associated with diseases
CC   such as rheumatoid arthritis.
XX
SQ   Sequence   144 AA;


  Query Match             1.8%;  Score 8;  DB 19;  Length 144;
  Best Local Similarity   100.0%;  Pred. No. 11;
  Matches    8;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    388 KWVNKTGR 395
          ||||||||
Db     90 kwvnktgr 97


RESULT  39
Y32944
ID   Y32944 standard; Protein; 240 AA.
XX
AC   Y32944;
XX
DT   09-NOV-1999  (first entry)
XX
DE   Mutant threonine dehydratase/deaminase protein sequence.
XX
KW   Threonine dehydratase/deaminase; TD; feedback insensitive mutant;
KW   molecular marker; isoleucine toxic structural analog resistance;
KW   isoleucine production; biosynthesis; degradable biopolymer; herbicide;
KW   polyhydroxybutyrate; antibiotic resistance marker; mutein.
XX
OS   Arabidopsis thaliana.
OS   Synthetic.
XX
PN   WO9941395-A1.
XX
PD   19-AUG-1999.
XX
PF   08-JAN-1999;   99WO-US00560.
XX
PR   10-JUL-1998;   98WO-US14362.
PR   17-FEB-1998;   98US-0074875.
XX
PA   (DOWC ) DOW AGROSCIENCES LLC.
PA   (PURD ) PURDUE RES FOUND.
XX
PI   Larrinua IM,  Merlo DJ,  Mourad GS,  Pareddy DR;
XX
DR   WPI; 1999-527375/44.
DR   N-PSDB; Z11202.
XX
PT   New nucleic acid encoding threonine dehydratase deaminase resistant
PT   to feedback inhibition, useful as selection marker for cell
PT   transformation and to impart herbicide resistance
XX
PS   Claim 13; Page 116-117; 194pp; English.
XX
CC   This sequence represents a mutant Arabidopsis thaliana threonine
CC   dehydratase/deaminase (TD) protein of the invention. The protein is a
CC   feedback insensitive mutant. The TD DNA sequence is used as molecular
CC   marker (imparting resistance to toxic structural analogues of isoleucine)
CC   for selecting transformed cells and to produce transformants with
CC   increased levels of isoleucine (and thus better nutritional value) or of
CC   intermediates in biosynthesis of isoleucine (e.g. 2-oxobutyrate, for
CC   synthesis of the degradable biopolymer poly(hydroxybutyrate)). Also
CC   TD-expressing plants permit use of the isoleucine structural analogues as
CC   herbicides. The DNA sequences are alternatives for antibiotic resistance
CC   markers (which are potentially harmful to the environment). Since no
CC   human analog of TD exists (humans can not synthesize isoleucine), it
CC   should be safe to use.
XX
SQ   Sequence   240 AA;


  Query Match             1.8%;  Score 8;  DB 20;  Length 240;
  Best Local Similarity   100.0%;  Pred. No. 18;
  Matches    8;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    283 QVPEQEME 290
          ||||||||
Db    206 qvpeqeme 213


RESULT  40
Y05708
ID   Y05708 standard; Protein; 240 AA.
XX
AC   Y05708;
XX
DT   19-JUL-1999  (first entry)
XX
DE   Feedback insensitive threonine dehydratase/deaminase polypeptide.
XX
KW   Threonine dehydratase/deaminase; omr1 gene; feedback inhibition;
KW   transgenic plant; selectable marker; isoleucine; mutant.
XX
OS   Arabidopsis thaliana.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 147
FT                   /note= "Arg in wild-type enzyme"
FT   Misc-difference 192
FT                   /note= "Arg in wild-type enzyme"
FT   Region          134..152
FT                   /note= "regulatory region R4"
FT   Region          184..202
FT                   /note= "regulatory region R6"
XX
PN   WO9902656-A1.
XX
PD   21-JAN-1999.
XX
PF   10-JUL-1998;   98WO-US14362.
XX
PR   17-FEB-1998;   98US-0074875.
PR   10-JUL-1997;   97US-0052096.
XX
PA   (PURD ) PURDUE RES FOUND.
XX
PI   Mourad GS;
XX
DR   WPI; 1999-120860/10.
DR   N-PSDB; X25337.
XX
PT   New sequences encode mutant threonine dehydratase/deaminase - which
PT   is insensitive to feedback inhibition, useful as a selective marker
PT   to produce transformed cells resistant to toxic isoleucine analogues
XX
```

```
PS   Disclosure; Page 68-69; 120pp; English.
XX
CC   This sequence represents the regulatory region of an Arabidopsis
CC   thaliana mutant threonine dehydratase/deaminase (TD) which, unlike
CC   the wild-type enzyme (see Y05702), is insensitive to feedback
CC   inhibition by isoleucine.  It is encoded by one of 9 claimed
CC   polynucleotides (see X25332-40), originally isolated and cloned from
CC   A. thaliana mutant line GM11b (omr1/omr1), which encode a feedback
CC   insensitive TD.  These can be used to transform a wide variety of
CC   plants, fungi, bacteria and yeast.  The polynucleotides differ from
CC   the wild-type only by 2 point mutations, which result in R499C and
CC   R554H amino acid substitutions (numbering according to wild-type
CC   TD) in the R4 and R6 regulatory regions.  These forms of TD are not
CC   only insensitive to feedback inhibition by isoleucine, but are also
CC   insensitive to structural analogues of isoleucine that are toxic to
CC   plants and microorganisms which synthesise only wild-type TD.
CC   Nucleotide sequences encoding mutated forms of TD can therefore be
CC   used to create cells that are insensitive to compounds normally
CC   toxic to cells expressing only wild-type TD enzymes, and thus may
CC   be used to provide a biochemical selectable marker.  Transformants
CC   harboring a nucleotide sequence comprising a promoter operably
CC   linked to a mutated TD sequence demonstrate increased levels of
CC   isoleucine production, and thus provide an improved nutrient source.
XX
SQ   Sequence   240 AA;


  Query Match             1.8%;  Score 8;  DB 20;  Length 240;
  Best Local Similarity   100.0%;  Pred. No. 18;
  Matches    8;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     283 QVPEQEME 290
           ||||||||
Db     206 qvpeqeme 213


RESULT  41
W64668
ID   W64668 standard; Protein; 259 AA.
XX
AC   W64668;
XX
DT   23-OCT-1998  (first entry)
XX
DE   Human TRID protein.
XX
KW   TRAIL receptor without intracellular domain; TRID; TNFR-5; human;
KW   tumour necrosis factor receptor-5; TNF-related apoptosis-inducing ligand;
KW   haematopoietic tissue; immune system; ligand; apoptosis; treatment.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..27
FT                   /label= signal
FT   Protein         27..259
FT                   /label= TRID
FT   Region          42..52
FT                   /label= epitope
FT   Region          58..66
FT                   /label= epitope
FT   Region          68..76
FT                   /label= epitope
FT   Region          79..85
FT                   /label= epitope
FT   Region          91..102
FT                   /label= epitope
FT   Region          110..122
FT                   /label= epitope
FT   Region          126..136
FT                   /label= epitope
FT   Region          142..148
FT                   /label= epitope
XX
PN   WO9830693-A2.
XX
PD   16-JUL-1998.
XX
PF   13-JAN-1998;   98WO-US00152.
XX
PR   07-AUG-1997;   97US-0054885.
PR   14-JAN-1997;   97US-0035496.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Ebner R,  Feng P,  Gentz RL,  Ni J,  Ruben SM,  Wei Y;
PI   Yu G;
XX
DR   WPI; 1998-399141/34.
DR   N-PSDB; V51348.
XX
PT   Human TRAIL receptor without an intracellular domain polypeptide -
PT   used in the diagnosis of immune system-related disorder(s)
XX
PS   Claim 1b; Fig 1; 90pp; English.
XX
CC   This sequence represents a human TRID (TRAIL (TNF-related
CC   apoptosis-inducing ligand) receptor without an intracellular domain).
CC   TRID is a member of the tumour necrosis factor receptor (TNFR) family
CC   also known as TNFR-5. TRID is expressed in haematopoietic tissues and
CC   other normal human tissues. For a number of immune system-related
CC   disorders, substantially altered (whether increased or decreased) levels
CC   of TRID gene expression can be detected, therefore the TRID polypeptides,
CC   nucleic acids and antibodies are useful in the diagnosis of such immune
CC   system related disorders. Mutations of the TRID gene can also be
CC   detected. TRID can also be used to identify ligands which may be useful
CC   in the treatment of apoptosis related disorders. TRID is administered to
CC   humans at a parenteral dose of 0.01 to 1 mg/kg/day.
XX
SQ   Sequence   259 AA;


  Query Match             1.8%;  Score 8;  DB 19;  Length 259;
  Best Local Similarity   100.0%;  Pred. No. 20;
  Matches    8;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     149 SPEMCRKC 156
           ||||||||
Db     121 spemcrkc 128


RESULT  42
Y05726
ID   Y05726 standard; Protein; 259 AA.
XX
AC   Y05726;
XX
DT   19-JUL-1999  (first entry)
XX
DE   Tumour necrosis factor receptor TRAIL-R3.
XX
KW   TRAIL-3; tumour necrosis factor receptor; apoptosis; cancer;
KW   therapy.
XX
OS   Mammalia.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..24
FT                   /note= "signal peptide"
FT   Protein         25..259
FT                   /note= "mature protein"
FT   Region          162..175
FT                   /note= "TAPE repeat"
FT   Region          176..191
FT                   /note= "TAPE repeat"
FT   Region          192..206
```

```
FT                  /note= "TAPE repeat"
FT   Region         207..221
FT                  /note= "TAPE repeat"
FT   Region         222..236
FT                  /note= "TAPE repeat"
FT   Domain         238..259
FT                  /note= "transmembrane domain"
XX
PN   WO9912963-A2.
XX
PD   18-MAR-1999.
XX
PF   11-SEP-1998;   98WO-US19029.
XX
PR   06-MAY-1998;   98US-0084422.
PR   12-SEP-1997;   97US-0058631.
XX
PA   (BIOJ ) BIOGEN INC.
XX
PI   Tschopp J;
XX
DR   WPI; 1999-276942/23.
DR   N-PSDB; X25349.
XX
PT   Novel tumor necrosis factor receptor proteins TRAIL-R2 and TRAIL-R3
XX
PS   Disclosure; Page 28; 28pp; English.
XX
CC   The present sequence represents TRAIL-R3, a novel mammalian
CC   cysteine-rich receptor of the tumour necrosis factor receptor family.
CC   The invention is related to novel receptors for TRAIL, i.e. TRAIL-2
CC   (see Y05725) and TRAIL-3.  TRAIL-3 is highly glycosylated.  It is
CC   a putative glycosylphosphatidylinositol-anchored protein, which is
CC   either cell-associated or processed and secreted.  Secreted
CC   TRAIL-R3 competes for the binding of TRAIL to TRAIL-R1 and/or
CC   TRAIL-R2, thereby acting as an inhibitor of apoptosis.  Expression
CC   of TRAIL-R3 is restricted to peripheral blood lymphocytes and
CC   skeletal muscle.  It is likely that TRAIL-3 acts as an important
CC   regulator of TRAIL-R2 and -R3 induced cell death in vivo.  A method
CC   for preventing or reducing the advancement, severity or effects of
CC   an immunological disease involves administering a TRAIL-R2 or
CC   TRAIL-R3 blocking agent such as a soluble TRAIL-R (preferably
CC   comprising a human immunoglobulin Fc domain) and an antibody.  A
CC   method of treating cancer involves administration of antibodies
CC   against TRAIL-R3 or TRAIL-R2.  A method of inducing cell death
CC   involves administration of an agent capable of inhibiting the
CC   binding of TRAIL-R2 or -R3 to its ligand.
XX
SQ   Sequence   259 AA;
```

```
  Query Match             1.8%;  Score 8;  DB 20;  Length 259;
  Best Local Similarity   100.0%;  Pred. No. 20;
  Matches    8;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     149 SPEMCRKC 156
           ||||||||
Db     121 spemcrkc 128
```

```
RESULT  43
W93578
ID   W93578 standard; Protein; 259 AA.
XX
AC   W93578;
XX
DT   18-JUN-1999  (first entry)
XX
DE   Human hAPO9 protein.
XX
KW   Tumour necrosis factor receptor; signal transducer molecule; TNF; APO4;
KW   developmental abnormality; gestational abnormalitity; prostate cancer;
KW   APO6; APO8; APO9; TNRL-1; TNRL-3; diagnosis; treatment; therapy; disease;
KW   cytoplasmic domain; immunogen; antibody preparation; breast carcinoma;
KW   apoptosis; human.
XX
OS   Homo sapiens.
XX
PN   WO9911791-A2.
XX
PD   11-MAR-1999.
XX
PF   04-SEP-1998;   98WO-US18393.
XX
PR   05-SEP-1997;   97US-0924634.
XX
PA   (UNIW ) UNIV WASHINGTON.
XX
PI   Chaudhary PM;
XX
DR   WPI; 1999-205191/17.
DR   N-PSDB; X23412.
XX
PT   New Tumor Necrosis Factor family receptor polypeptides and ligands -
PT   useful for diagnosis and treatment of prostate cancer and
PT   developmental or gestational abnormalities
XX
PS   Claim 24; Fig 6; 156pp; English.
XX
CC   This invention describes isolated Tumor Necrosis Factor (TNF) family
CC   receptor polypeptides: APO4, APO6, APO8 and APO9 or their active
CC   fragments, and isolated TNF related ligands 1 and 3 (TNRL1 and TNRL3) or
CC   their active fragments. APO4 is useful for diagnosing prostate cancer
CC   by determining levels of APO4 in an individual. Prostate cancer can also
CC   be treated using APO4 selective binding agents linked to a therapeutic
CC   moiety. APO4 polypeptides are also useful for identifying selective
CC   binding agents, useful in diagnosis/treatment of disease by binding of
CC   agents to the polypeptide/active fragment which is extracellular, or
CC   expressed on the cell surface. The binding is preferably performed in
CC   vivo. APO4 polypeptides/ active fragments are also useful for screening
CC   for agonists and antagonists by binding and observing the changer in APO4
CC   activity. Effective pharmacological agents useful in diagnosis or
CC   treatment of disease are also identified using APO4 polypeptides/active
CC   fragments and APO4 signal transducer molecules that specifically interact
CC   with a cytoplasmic domain of APO4 and detecting a change in level of APO4
CC   activity. The method is performed in vivo or in vitro. APO polypeptides
CC   are all useful as immunogens for preparing antibodies. APO4 is also
CC   useful for diagnosis/treatment of developmental or gestational
CC   abnormalities. APO8 was transfected to human breast carcinoma cell line
CC   MCF-7, and induced apoptosis.
XX
SQ   Sequence   259 AA;
```

```
  Query Match             1.8%;  Score 8;  DB 20;  Length 259;
  Best Local Similarity   100.0%;  Pred. No. 20;
  Matches    8;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     149 SPEMCRKC 156
           ||||||||
Db     121 spemcrkc 128
```

```
RESULT  44
W88408
ID   W88408 standard; Protein; 259 AA.
XX
AC   W88408;
XX
DT   26-APR-1999  (first entry)
XX
DE   Human Apo-2DcR protein (amino acids 1-259).
XX
KW   Apo-2DcR; human; apoptosis; tumour necrosis factor receptor;
KW   neurodegeneration; autoimmune disease; inflammation; cancer;
KW   therapy.
```

```
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..29
FT                   /note= "predicted signal peptide"
FT   Domain          1..161
FT                   /note= "extracellular domain, this domain is
FT                          specifically claimed in Claim 5"
FT   Domain          68..109
FT                   /note= "cysteine-rich domain"
FT   Domain          110..149
FT                   /note= "cysteine-rich domain"
FT   Peptide         162..176
FT                   /note= "tandem repeat peptide"
FT   Peptide         177..191
FT                   /note= "tandem repeat peptide"
FT   Peptide         192..206
FT                   /note= "tandem repeat peptide"
FT   Peptide         207..221
FT                   /note= "tandem repeat peptide"
FT   Peptide         222..236
FT                   /note= "tandem repeat peptide"
FT   Region          225..259
FT                   /note= "hydrophobic C-terminal region"
FT   Modified-site   77
FT                   /note= "N-glycosylation"
FT   Modified-site   140
FT                   /note= "N-glycosylation"
FT   Modified-site   156
FT                   /note= "N-glycosylation"
FT   Modified-site   169
FT                   /note= "N-glycosylation"
FT   Modified-site   184
FT                   /note= "N-glycosylation"
XX
PN   WO9858062-A1.
XX
PD   23-DEC-1998.
XX
PF   12-JUN-1998;   98WO-US12456.
XX
PR   18-JUN-1997;   97US-0878168.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Baker KP,  Chuntharapai A,  Gurney A;
PI   Kim KJ,  Wood WI;
XX
DR   WPI; 1999-095340/08.
DR   N-PSDB; V84347.
XX
PT   New Apo-2DcR polypeptide - used for modulation and diagnosis of
PT   apoptosis, e.g. in neurodegeneration
XX
PS   Claim 1; Page 50-51; 88pp; English.
XX
CC   This polypeptide comprises human Apo-2DcR, a novel member of the
CC   tumour necrosis factor receptor family that binds to Apo-2 ligand.
CC   Its amino acid sequence was deduced from the nucleotide sequence
CC   of an isolated cDNA clone (see V84347); an alternative translation
CC   initiation site in this clone will encode a polypeptide (see
CC   W88409) comprising amino acid residues -40 to 269 of Apo-2DcR.
CC   Apo-2DcR shows more sequence identity to DR4 (60%) and Apo-2 (50%)
CC   than to other apoptosis-linked receptors.  The polypeptide can be
CC   obtained by expression in host cells using the vector deposited as
CC   ATCC 209087.  The invention provides vectors and host cells for
CC   recombinant production of Apo-2DcR polypeptides, antibodies, and
CC   transgenic and knockout animals (useful e.g. for screening and
CC   developing drugs that protect against excessive apoptosis).
CC   Apo-2DcR, or chimeras comprising Apo-2DcR or its (claimed)
CC   extracellular domain fused to a heterologous polypeptide are used
CC   to modulate apoptosis of mammalian cells (claimed) and/or NF-kappaB
CC   activation by Apo-2 ligand, and may be expressed in vivo or ex vivo
CC   for gene therapy.  They can be used in methods for the modulation
CC   and diagnosis of apoptosis e.g. in cases of neurodegeneration,
CC   autoimmune diseases and inflammation.  Most human tumour cells do
CC   not express Apo-2DcR transcripts, but normal tissues do, suggesting
CC   that Apo-2DcR may permit selective killing of cancer cells by Apo-2
CC   ligand, possibly by protecting normal, but not cancerous, cells.
XX
SQ   Sequence   259 AA;


  Query Match             1.8%;  Score 8;  DB 20;  Length 259;
  Best Local Similarity   100.0%;  Pred. No. 20;
  Matches    8;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     149 SPEMCRKC 156
           ||||||||
Db     121 spemcrkc 128


RESULT  45
B36696
ID   B36696 standard; Protein; 259 AA.
XX
AC   B36696;
XX
DT   15-MAR-2001  (first entry)
XX
DE   Human tumour necrosis factor receptor 5 (TRID) protein SEQ ID NO:2.
XX
KW   Human; tumour necrosis factor receptor 5; TRID; TNFR-5; TR5; nootropic;
KW   TRAIL receptor without intracellular domain; diagnosis; cytostatic;
KW   tumour necrosis factor related apoptosis inducing ligand; vasotropic;
KW   immunosuppressive; neuroprotective; antiviral; antiinflammatory;
KW   anticonvulsant; antiparasitic; cardiant; anti-HIV; antiparkinsonian;
KW   gene therapy; restenosis; graft versus host disease; tumour; cancer;
KW   apoptotic cell death related disease; autoimmune disorder;
KW   cardiovascular disorder; viral infection.
XX
OS   Homo sapiens.
XX
PN   WO200071150-A1.
XX
PD   30-NOV-2000.
XX
PF   18-MAY-2000; 2000WO-US13515.
XX
PR   20-MAY-1999;   99US-0135164.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Wei Y,  Ruben SM,  Gentz RL,  Ni J;
XX
DR   WPI; 2001-041051/05.
DR   N-PSDB; C90774.
XX
PT   Nucleic acid encoding a TRID polypeptide, also referred to as tumor
PT   necrosis factor receptor 5, useful in the diagnosis, treatment or
PT   prevention of cancer, autoimmune disorders and viral infection -
XX
PS   Claim 15; Fig 1; 285pp; English.
XX
CC   The present sequence represents the human TRID protein (tumour necrosis
CC   factor (TNF) related apoptosis inducing ligand (TRAIL) receptor without
CC   intracellular domain, also referred to as tumour necrosis factor
CC   receptor 5 (TNFR-5 or TR5)). TRID has cytostatic, immunosuppressive,
CC   nootropic, neuroprotective, antiviral, antiinflammatory, anticonvulsant,
CC   antiparasitic, cardiant, anti-HIV, antiparkinsonian and vasotropic
CC   activities, and can be used in gene therapy. The TRID polynucleotides
CC   are useful for detecting complementary polynucleotides. TRID proteins and
CC   polynucleotides are useful in the treatment of tumours, resistance to
CC   parasite, bacteria and viruses, restenosis and graft versus host disease.
CC   They are also useful for inducing proliferation of T-cells, endothelial
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CC   cells and certain haematopoietic cells, to regulate antiviral responses
CC   and to prevent certain autoimmune diseases after stimulation of TRID by
CC   an agonist or TRAIL binding facilitator. The antibodies which bind TRID
CC   polypeptides are useful for treating and/or preventing diseases
CC   associated with increased or decreased apoptotic cell death. The TRID
CC   polynucleotides, proteins, antibodies, agonists and antagonists are
CC   useful in the diagnosis, treatment or prevention of: (a) cancer;
CC   (b) autoimmune disorders; (c) diseases associated with increased
CC   apoptosis; (d) cardiovascular disorders; and (e) viral infection.
XX
SQ   Sequence   259 AA;


  Query Match             1.8%;  Score 8;  DB 22;  Length 259;
  Best Local Similarity   100.0%;  Pred. No. 20;
  Matches    8;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     149 SPEMCRKC 156
           ||||||||
Db     121 spemcrkc 128


RESULT  46
B53091
ID   B53091 standard; Protein; 259 AA.
XX
AC   B53091;
XX
DT   28-FEB-2001  (first entry)
XX
DE   Human angiogenesis-associated protein PRO366, SEQ ID NO:152.
XX
KW   Human; angiogenesis-associated protein; PRO; endothelial cell growth;
KW   cardiac hypertrophy; cardiovascular disorder; endothelial disorder;
KW   angiogenic disorder; atherosclerosis; osteoporosis; hypertension;
KW   myocardial infarction; diabetic retinopathy; rheumatoid arthritis;
KW   Crohn's disease; psoriasis; endometriosis; ulcer; wound healing; cancer;
KW   Alzheimer's disease; Huntington's disease; stroke; drug screening;
KW   gene therapy; transgenic animal.
XX
OS   Homo sapiens.
XX
PN   WO200053753-A2.
XX
PD   14-SEP-2000.
XX
PF   05-JAN-2000; 2000WO-US00219.
XX
PR   08-MAR-1999;   99WO-US05028.
PR   12-MAR-1999;   99US-0123957.
PR   14-MAY-1999;   99US-0134287.
PR   02-JUN-1999;   99WO-US12252.
PR   23-JUN-1999;   99US-0141037.
PR   20-JUL-1999;   99US-0144758.
PR   26-JUL-1999;   99US-0145698.
PR   01-SEP-1999;   99WO-US20111.
PR   08-SEP-1999;   99WO-US20594.
PR   15-SEP-1999;   99WO-US21090.
PR   15-SEP-1999;   99WO-US21547.
PR   05-OCT-1999;   99WO-US23089.
PR   30-NOV-1999;   99WO-US28313.
PR   30-NOV-1999;   99WO-US28409.
PR   02-DEC-1999;   99WO-US28564.
PR   02-DEC-1999;   99WO-US28565.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Baker KP,  Ferrara N,  Gerber H,  Goddard A;
PI   Godowski PJ,  Gurney AL,  Hillan KJ,  Kuo SS,  Mark MR,  Marsters SA;
PI   Paoni NF,  Pitti RM,  Watanabe CK,  Williams PM,  Wood WI;
XX
DR   WPI; 2001-090793/10.
DR   N-PSDB; C97488.
XX
PT   New isolated nucleic acid for producing a PRO polypeptide, analyzing
PT   genetic disorders and treating cardiovascular, endothelial or
PT   angiogenic disorders, such as atherosclerosis, wounds or cancer -
XX
PS   Claim 69; Fig 56; 293pp; English.
XX
CC   The invention relates to novel human angiogenesis-associated proteins
CC   designated PRO proteins (B53064-B53097), and to nucleic acids encoding
CC   PRO proteins. The invention also relates to vectors and host cells
CC   comprising a PRO nucleic acid, the recombinant production of a PRO
CC   protein, PRO antibodies specific for a PRO protein, fusion proteins
CC   comprising a PRO protein, agonists or antagonists of a PRO protein, and
CC   compounds which inhibit the expression of a PRO gene. The invention
CC   additionally encompasses methods of identifying modulators of PRO
CC   expression or activity; diagnosing a cardiovascular, endothelial or
CC   angiogenic disorder, or a susceptibility to such a disorder by detecting
CC   mutations in a PRO gene, or the expression level of a PRO gene within a
CC   particular tissue; treating a cardiovascular, endothelial or angiogenic
CC   disorder via the administration of a PRO protein, PRO nucleic acid, or
CC   PRO agonist or antagonist; a retroviral gene therapy vector comprising a
CC   PRO nucleic acid; and methods of inhibiting or stimulating endothelial
CC   cell growth, cardiac hypertrophy or PRO-induced angiogenesis via the
CC   administration of a PRO protein, or an agonist or antagonist thereof.
CC   PRO nucleic acids, PRO proteins, antibodies against PRO proteins, PRO
CC   agonists and PRO antagonists may be used as therapeutic agents to treat
CC   cardiovascular, endothelial or angiogenic disorders, such as
CC   atherosclerosis, osteoporosis, myocardial infarction, hypertension,
CC   diabetic retinopathy, rheumatoid arthritis, Crohn's disease, psoriasis,
CC   endometriosis, ulcers, wounds, cancer, Alzheimer's disease, Huntington's
CC   disease, or stroke. PRO nucleic acids are additionally useful in the
CC   recombinant production of PRO proteins, as hybridisation probes to screen
CC   libraries to isolate cDNAs with sequence identity to PRO proteins, to
CC   map genes encoding PRO proteins, to analyse genetic disorders, and in
CC   gene therapy. PRO nucleic acids can also be used to produce transgenic
CC   animals useful for the development and screening of potential therapeutic
CC   agents. The present sequence represents a PRO protein of the invention.
XX
SQ   Sequence   259 AA;


  Query Match             1.8%;  Score 8;  DB 22;  Length 259;
  Best Local Similarity   100.0%;  Pred. No. 20;
  Matches    8;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     149 SPEMCRKC 156
           ||||||||
Db     121 spemcrkc 128


RESULT  47
W76331
ID   W76331 standard; Protein; 299 AA.
XX
AC   W76331;
XX
DT   11-JAN-1999  (first entry)
XX
DE   Human tumour necrosis related receptor TR5.
XX
KW   Tumour necrosis related receptor; TR5; human; inflammation;
KW   arthritis; septicaemia; transplant rejection; autoimmune disease;
KW   inflammatory bowel disease; graft versus host disease; infection;
KW   stroke; ischaemia; acute respiratory disease syndrome; psoriasis;
KW   restenosis; brain injury; AIDS; bone disease; cancer;
KW   atherosclerosis; Alzheimer's disease; therapy; diagnosis.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..165
FT                   /label= Sig_peptide
FT   Protein         66..299
```

```
FT                  /label= Mat_protein
XX
PN   EP867509-A2.
XX
PD   30-SEP-1998.
XX
PF   04-FEB-1998;   98EP-0300827.
XX
PR   28-JUL-1997;   97US-0901469.
PR   05-FEB-1997;   97US-0795910.
XX
PA   (SMIK ) SMITHKLINE BEECHAM CORP.
XX
PI   Lyn SDP,  Tan KB,  Truneh A,  Young PR;
XX
DR   WPI; 1998-497862/43.
DR   N-PSDB; V56990.
XX
PT   New polynucleotide encoding TR5 polypeptide - used to diagnose,
PT   prevent and treat e.g. inflammation, arthritis, septicaemia,
PT   autoimmune diseases, infections, stroke, ischaemia, ARDS, psoriasis,
PT   restenosis, brain injury, AIDS and bone diseases
XX
PS   Claim 5; Fig 1; 22pp; English.
XX
CC   This is the amino acid sequence of human tumour necrosis related
CC   receptor TR5, as deduced from the sequence of an isolated cDNA
CC   clone (see V56990). The protein is characterised as a GPI-linked
CC   protein that has a membrane proximal O-glycosylation region. The
CC   invention provides methods for the recombinant production of TR5
CC   and its use in diagnostic and therapeutic methods. Treatment of a
CC   subject in need of enhanced TR5 activity comprises administering an
CC   agonist to the polypeptide and/or providing TR5 polynucleotide in a
CC   form so as to effect production of the polypeptide activity in vivo.
CC   Treatment of a subject with the need to inhibit TR5 polypeptide
CC   activity comprises administering an antagonist to the polypeptide,
CC   administering a nucleic acid that inhibits the expression of the
CC   nucleotide sequence encoding the polypeptide and/or administering a
CC   polypeptide that competes with the polypeptide for its ligand,
CC   substrate or receptor. Diagnosing a disease or a susceptibility
CC   to a disease related to expression or activity of TR5 polypeptide,
CC   comprises determining the presence or absence of mutation in the
CC   nucleotide sequence encoding the TR5 polypeptide in the genome of
CC   the subject and/or analysing for the presence or amount of TR5
CC   polypeptide expression in a sample. Identification of compounds
CC   which bind to TR5 comprises contacting host cells with a candidate
CC   compound and assessing the ability of it to bind to the cells. The
CC   active agents can be used for the treatment of chronic and acute
CC   inflammation, arthritis, septicaemia, autoimmune diseases (e.g.
CC   inflammatory bowel disease, psoriasis), transplant rejection,
CC   graft vs host disease, infection, stroke, ischaemia, acute
CC   respiratory disease syndrome, restenosis, brain injury, AIDS, bone
CC   diseases, cancer (e.g. lymphoproliferative disorders),
CC   atherosclerosis and Alzheimer's disease.
XX
SQ   Sequence   299 AA;


  Query Match             1.8%;  Score 8;  DB 19;  Length 299;
  Best Local Similarity   100.0%;  Pred. No. 22;
  Matches    8;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     149 SPEMCRKC 156
           ||||||||
Db     161 spemcrkc 168


RESULT  48
Y29864
ID   Y29864 standard; Protein; 299 AA.
XX
AC   Y29864;
XX
DT   17-NOV-1999  (first entry)
XX
DE   Human secreted protein clone ij1442_1.
XX
KW   Human; secreted protein; biological activity; nutritional; cytokine;
KW   cell proliferation; differentiation; immune stimulating; vaccine;
KW   haematopoiesis regulation; tissue growth; haemostatic; thrombolytic;
KW   anti-inflammatory; tumour inhibition.
XX
OS   Homo sapiens.
XX
PN   WO9946287-A1.
XX
PD   16-SEP-1999.
XX
PF   11-MAR-1999;   99WO-US05243.
XX
PR   11-MAR-1998;   98US-0077521.
PR   14-MAY-1998;   98US-0079124.
PR   10-MAR-1999;   99US-0266105.
XX
PA   (GEMY ) GENETICS INST INC.
XX
PI   Jacobs K,  McCoy JM,  LaVallie ER,  Collins-Racie LA,  Evans C;
PI   Merberg D,  Treacy M,  Agostino MJ,  Steininger RJ;
XX
DR   WPI; 1999-551362/46.
DR   N-PSDB; Z21096.
XX
PT   Polynucleotides encoding secreted human proteins, derived from human
PT   fetal brain, human adult blood, human adult bladder, or human adult
PT   neural tissue cDNA libraries.
XX
PS   Claim 17; Page 104; 118pp; English.
XX
CC   Z21093 to Z21102 encode new human secreted proteins and Y29861 to Y29873
CC   represent the secreted proteins encoded by the polynucleotide sequences.
CC   Z21103 to Z21112 represent probes for the secreted proteins. The
CC   polynucleotides and proteins are predicted to have biological activities
CC   which would make them suitable for treating, preventing or ameliorating
CC   medical conditions in humans and animals, although no supporting data
CC   is given.  Suggested activities include nutritional activity, cytokine
CC   and cell proliferation/differentiation activity, immune stimulating
CC   (e.g. as vaccines) or suppressing activity, haematopoiesis regulating
CC   activity, tissue growth activity, activin/inhibin activity,
CC   chemotactic/chemokinetic activity, haemostatic and thrombolytic
CC   activity, receptor/ligand activity, anti-inflammatory activity,
CC   cadherin/tumour invasion suppressor activity, and tumour inhibition
CC   activity. The polynucleotides and proteins can also be used as
CC   nutritional sources or supplements. Such uses include use as a protein or
CC   amino acid supplement, use as a carbon source, use as a nitrogen source
CC   and use as a source of carbohydrate. They may also have utility in
CC   compositions used for bone, cartilage, tendon, ligament, and/or nerve
CC   tissue growth or regeneration, as well as for wound healing and tissue
CC   repair and replacement, and in the treatment of burns, incisions and
CC   ulcers. The proteins which induce cartilage and/or bone growth in
CC   circumstances where bone is not normally formed, have application in
CC   the healing of bone fractures and cartilage damage or defects in humans
CC   and other animals.
XX
SQ   Sequence   299 AA;


  Query Match             1.8%;  Score 8;  DB 20;  Length 299;
  Best Local Similarity   100.0%;  Pred. No. 22;
  Matches    8;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     149 SPEMCRKC 156
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Db     161 spemcrkc 168


RESULT  49
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Y05744
ID   Y05744 standard; Protein; 299 AA.
XX
AC   Y05744;
XX
DT   19-JUL-1999  (first entry)
XX
DE   Tumour necrosis factor receptor TR5.
XX
KW   Tumour necrosis factor receptor; TR5; TRID; DcR1; agonist;
KW   antagonist; screening; human; cancer; AIDS; Alzheimer's disease;
KW   inflammation; arthritis; septicaemia; autoimmune disease;
KW   psoriasis; inflammatory bowel disease; transplant rejection;
KW   graft versus host disease; infection; stroke; ischaemia;
KW   acute respiratory disease syndrome; restenosis; brain injury;
KW   bone disease; atherosclerosis; therapy.
XX
OS   Homo sapiens.
XX
PN   EP911633-A1.
XX
PD   28-APR-1999.
XX
PF   02-OCT-1998;   98EP-0203332.
XX
PR   08-OCT-1997;   97US-0061334.
XX
PA   (SMIK ) SMITHKLINE BEECHAM CORP.
XX
PI   McDonnell PC,  Young PR,  Zou J;
XX
DR   WPI; 1999-246560/21.
XX
PT   Identifying agonists and antagonists of tumor necrosis factor
PT   related receptors TR1, TR3 and TR5, and of ligand TL3, useful for
PT   treatment of cancer, AIDS, Alzheimer's disease, bone disease etc
XX
PS   Disclosure; Page 13-14; 23pp; English.
XX
CC   The present sequence represents tumour necrosis factor receptor
CC   (TNFR) TR5, also known as TRID or DcR1.  The invention relates
CC   to TNFR related polypeptides TR1, TR3 and TR5 (see Y05742-44) and
CC   their ligand TL3 (see Y05745).  TR1, TR3, TR5 and TL3 are used in
CC   claimed methods of identifying agonists and antagonists, i.e.
CC   compounds that bind to the receptors or ligand, and which activate
CC   (agonist) or inhibit activation of (antagonists) TR1, TR3, TR5 or
CC   TL3.  A screening kit for identifying agonists, antagonists,
CC   ligands, receptors, substrates, enzymes etc. for TR1, TR3, TR5 or
CC   TL3 polypeptides is provided.  The agonists and antagonists are
CC   useful for treatment of chronic and acute inflammation, arthritis,
CC   septicaemia, autoimmune disease e.g. inflammatory bowel disease,
CC   psoriasis, transplant rejection, graft versus host disease,
CC   infection, stroke, ischaemia, acute respiratory disease syndrome,
CC   restenosis, brain injury, AIDS, bone diseases, cancer (e.g.
CC   lymphoproliferative disorders), atherosclerosis and Alzheimer's
CC   disease, etc., caused by imbalance of TR1, TR3, TR5 or TL3.
XX
SQ   Sequence   299 AA;


  Query Match             1.8%;  Score 8;  DB 20;  Length 299;
  Best Local Similarity   100.0%;  Pred. No. 22;
  Matches    8;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     149 SPEMCRKC 156
           ||||||||
Db     161 spemcrkc 168


RESULT  50
Y00933
ID   Y00933 standard; Protein; 299 AA.
XX
AC   Y00933;
XX
DT   02-JUN-1999  (first entry)
XX
DE   Human TRAIL-R3 protein sequence.
XX
KW   Human; DR5; DR5s; TRAIL-R3; apoptosis related condition; cancer; therapy;
KW   autoimmune disease; viral infection; degenerative disorder;
KW   amyotrophic lateral sclerosis; retinitis pigmentosa; ischaemic injury;
KW   cerebellar degeneration; myelodysplastic syndrome.
XX
OS   Homo sapiens.
XX
PN   WO9909165-A1.
XX
PD   25-FEB-1999.
XX
PF   14-AUG-1998;   98WO-US16945.
XX
PR   15-AUG-1997;   97US-0055906.
XX
PA   (IDUN-) IDUN PHARM INC.
XX
PI   Alnemri ES;
XX
DR   WPI; 1999-181035/15.
DR   N-PSDB; X27280.
XX
PT   Newly isolated polynucleotide encoding a mammalian TRAIL receptor
PT   protein - useful in for screening for (ant)agonists that modulate
PT   the apoptotic activity mediated by DR5 or TRAIL-R3 proteins
XX
PS   Claim 16; Page 62-63; 71pp; English.
XX
CC   This sequence is the human TRAIL receptor TRAIL-R3 of the invention. An
CC   antibody against the TRAIL receptors is useful for detecting mammalian
CC   DR5 or TRAIL-R3 proteins in a sample. Recombinant cells are useful in
CC   bioassays for screening for (ant)agonists of DR5 or TRAIL-R3 proteins.
CC   (Ant)agonists identified by the assay are useful for modulating the
CC   apoptotic activity mediated by DR5 or TRAIL-R3 proteins. Apoptosis
CC   related conditions which are treated in this way, include cancer
CC   (e.g. lymphomas and carcinomas), autoimmune diseases (e.g. systemic lupus
CC   erythematosus and immune-mediated glomerulonephritis), viral infections
CC   (e.g. herpes virus, poxvirus and adenovirus), degenerative disorders
CC   (e.g. Alzheimer's disease and Parkinson's disease), amyotrophic lateral
CC   sclerosis, retinitis pigmentosa, cerebellar degeneration, myelodysplastic
CC   syndromes (e.g. aplastic anaemia) and ischaemic injury (e.g. myocardial
CC   infarction and stroke). The polynucleotides can also be used to treat
CC   these diseases. Antisense oligonucleotides to the DNA sequences can be
CC   used to form a composition that is useful for inhibiting expression of a
CC   human DR5 or TRAIL-R3 protein.
XX
SQ   Sequence   299 AA;


  Query Match             1.8%;  Score 8;  DB 20;  Length 299;
  Best Local Similarity   100.0%;  Pred. No. 22;
  Matches    8;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     149 SPEMCRKC 156
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Db     161 spemcrkc 168


Search completed: May 23, 2001, 14:21:02
Job time: 116 sec
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